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STATE OF KANSAS

FIRST BIENNIAL REPORT

OF THE

BOARD OF ADMINISTRATION

EDUCATIONAL INSTITUTIONS SECTION

UNIVERSITY OF KANSAS
(Twenty-seventh Biennial.)

KANSAS STATE AGRICULTURAL COLLEGE
(Twenty-seventh Biennial.)

MANUAL TRAINING NORMAL SCHOOL
(Third Biennial.)

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(Third Biennial.)

STATE NORMAL SCHOOL
(Twenty-seventh Biennial.)

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KANSAS SCHOOL FOR THE DEAF
(Twenty-eighth Biennial.)

KANSAS SCHOOL FOR THE BLIND
(Twenty-first Biennial.)

KANSAS STATE FISH HATCHERY
(Second Biennial.)

For the Two Years Ending June 30, 1918

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For the Two Years Ending June 30, 1918

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1919
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State Tubercular Sanatorium (Norton)	C. S. Kenney, *Superintendent.*

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BIENNIAL REPORT

OF THE

UNIVERSITY OF KANSAS

LAWRENCE, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

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FRANK STRONG.................................Chancellor.

KANSAS STATE PRINTING PLANT
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CHANCELLOR'S REPORT.

To the Honorable Board of Administration:

I have the honor to make the following report for the University of Kansas for the two years ending June 30, 1918:

ENROLLMENT.

The first year of the biennium was passed under normal conditions, for the reason that war was not declared against Germany until April of that year. From all indications the University was just beginning its period of most rapid development. The increase in enrollment for several years past had been satisfactory. In 1916-'17 it took a strong upward turn, and at the close of the year showed by far the largest increase the University had ever had. The total enrollment, excluding all duplicates, for the year 1915-'16, the last year preceding the biennium, was 2,959. The total enrollment, excluding all duplicates, for the year 1916-'17, the first year of the biennium of this report, was 3,437, an increase of 478. This increase was participated in by all of the divisions of the University except the School of Pharmacy, which showed a slight decrease. The increase in the College of Liberal Arts was especially marked, the enrollment in this division of the University rising from 1,713 to 1,927.

The story of the second year of the biennium is different. When the year 1917-'18 opened the United States was already forward in the war. Before the end of the previous University year, and during the summer, 600 or 800 University men had enlisted in some form of war service. The registration of June 5, 1917, included a large number of University men. During the year of 1917-'18 the losses of the University by draft and by enlistment were very great. The result was a considerable decline in enrollment, the total number for 1917-'18 being 2,840 against 3,734 of the year before, a decrease of 597. This does not tell the story accurately, for a large number of men enrolling were either called or enlisted soon after they entered the University, so that the attendance at the University before the end of the year was much smaller than the enrollment would indicate.

The effect upon the different schools of the University is interesting: The Graduate School fell from 137 to 87; the College of Liberal Arts from 1,927 to 1,605; the School of Engineering from 496 to 399; the School of Fine Arts from 252 to 225; the School of Law from 180 to 112; the School of Pharmacy from 59 to 42. The School of Medicine increased from 145 to 170, this being due to the orders of the federal government requiring medical schools to maintain themselves at the highest point of numbers and efficiency in order that the supply of physicians and surgeons being turned out should be as continuous and large as possible. The School of Education fell from 333 to 316; the Summer Session from 817 to 743.

Besides the figures of enrollment shown above, the University Extension Division showed a large increase in the number of students under instruction.

The regular enrollment for the University of Kansas was distributed as follows:

	1916-'17.	*1917-'18.*
Graduate School	137	87
College of Liberal Arts and Sciences	1,927	1,605
School of Engineering	496	399
School of Fine Arts	252	225
School of Law	180	112
School of Pharmacy	59	42
School of Medicine	145	170
School of Education	333	316
Total enrollment, regular session	3,529	2,956
Names counted twice	591	610
Net enrollment, regular session	2,938	2,346
The Summer Session (excluding duplicates)	499	494
Total registration	3,437	2,840

DEGREES GRANTED.

The numbers of degrees granted by the University are as follows:

June, 1917. Master of arts, 58; master of science, 6; civil engineer, 1; bachelor of arts, 219; bachelor of science in medicine, 12; bachelor of science in civil engineering, 19; bachelor of science in electrical engineering, 13; bachelor of science in mechanical engineering, 4; bachelor of science in mining engineering, 4; bachelor of science in chemical engineering, 8; bachelor of science in architectural engineering, 6; bachelor of laws, 48; bachelor of music, 15; bachelor of music in pipe organ, 1; teacher's certificate in violin, 1; teacher's certificate in public-school music, 9; bachelor of science in pharmacy, 2; pharmaceutical chemist, 4; graduate in pharmacy, 5; doctor of medicine, 18; certificate for graduate nurse, 10; bachelor of science in education, 2; University teacher's diploma, 89. Total, 554.

June, 1918. Master of arts, 40; master of science, 6; civil engineer, 1; electrical engineer, 1; bachelor of arts, 188; bachelor of science in medicine, 15; bachelor of science in civil engineering, 4; bachelor of science in electrical engineering, 12; bachelor of science in mechanical engineering, 3; bachelor of science in chemical engineering, 8; bachelor of science in mining engineering, 2; bachelor of science in architectural engineering, 4; bachelor of laws, 19; bachelor of painting, 3; bachelor of music, 9; three-year certificate in piano, 1; teacher's certificate in public school music, 10; bachelor of science in pharmacy, 1; pharmaceutical chemist, 4; graduate in pharmacy, 3; doctor of medicine, 18; certificate for graduate nurse, 9; bachelor of science in education, 2; University teacher's diploma, 99. Total, 462.

THE UNIVERSITY AN INTELLECTUAL CENTER.

The University of Kansas is very far from being a local or even a purely state institution so far as concerns the field from which it draws its students. Indeed, the University in a growing degree is becoming a center of intellectual life in this part of the United States. There were 103 of the 105 counties in Kansas represented in the total enrollment for 1916-'17. Aside from Douglas county, Wyandotte had the largest number, 172, with Shawnee second, with 116. The enrollment also included students from twenty-two other states of the Union and three foreign countries. To be sure, the war is interfering with the development of the University, but after the war is over there is every reason to expect that this movement will continue in an accelerated degree.

Distribution by Kansas Counties, 1916-'17.

Allen	43
Anderson	34
Atchison	31
Barber	8
Barton	34
Bouron	24
Brown	35
Butler	31
Chase	15
Chautauqua	16
Cherokee	21
Cheyenne	2
Clark	11
Clay	19
Cloud	26
Coffey	10
Comanche	11
Cowley	41
Crawford	40
Decatur	7
Dickinson	42
Doniphan	16
Douglas*	863
Edwards	6
Elk	15
Ellis	7
Ellsworth	14
Erie	1
Finney	6
Ford	22
Franklin	23
Geary	10
Gove	2
Graham	5
Grant	1
Gray	6
Greeley	2
Greenwood	19
Hamilton	1
Harper	18
Harvey	35
Haskell	1
Jackson	17
Jefferson	29
Jewell	42
Johnson	39
Kearny	3
Kingman	21
Kiowa	11
Labette	24
Lane	4
Leavenworth	68
Lincoln	15
Linn	22
Logan	1
Lyon	23
Marion	39
Marshall	40
Meade	23
Miami	16
Mitchell	30
Montgomery	72
Morris	9
McPherson	39
Nemaha	29
Neosho	40
Ness	13
Norton	15
Osage	43
Osborne	29
Ottawa	34
Pawnee	17
Phillips	5
Pottawatomie	16
Pratt	20
Rawlins	7
Reno	58
Republic	8
Rice	20
Riley	5
Rooks	6
Rush	4
Russell	15
Saline	25
Scott	3
Sedgwick	76
Seward	6
Shawnee	116
Sheridan	3
Sherman	1
Smith	17
Stafford	19
Stevens	3
Sumner	42
Thomas	3
Trego	15
Wabaunsee	27
Wallace	2
Washington	25
Wichita	1
Wilson	35
Woodson	6
Wyandotte	172
Counties, 103	3,142

BY STATES.

Arkansas	5
California	1
Colorado	8
Connecticut	1
Florida	1
Idaho	2
Illinois	5
Indiana	3
Iowa	6
Kansas	3,142
Massachusetts	1
Michigan	1
Missouri	173
Nebraska	1
New Jersey	2
New York	2
New Mexico	3
Oklahoma	64
Oregon	2
Pennsylvania	1
South Dakota	2
Texas	6
Washington	1
Central America	2
Japan	1
China	1
Grand total	3,437

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*A large number of students whose names appear as residents of Douglas county are so listed because they temporarily reside in Lawrence for the purpose of attending the University.

Distribution by Kansas Counties, 1917-'18.

Allen	42	Hamilton	1	Phillips	8
Anderson	22	Harper	13	Pottawatomie	11
Atchison	23	Harvey	31	Pratt	14
Barber	10	Haskell	1	Rawlins	3
Barton	20	Jackson	16	Reno	59
Bourbon	21	Jefferson	25	Republic	5
Brown	36	Jewell	36	Rice	18
Butler	32	Johnson	23	Riley	14
Chase	8	Kearny	3	Rooks	6
Chautauqua	7	Kingman	11	Rush	1
Cherokee	22	Kiowa	6	Russell	11
Cheyenne	4	Labette	23	Saline	21
Clark	8	Lane	3	Scott	3
Clay	14	Leavenworth	59	Sedgwick	74
Cloud	22	Lincoln	14	Seward	7
Coffey	14	Linn	17	Shawnee	81
Comanche	6	Lyon	16	Sheridan	4
Cowley	35	Marion	25	Sherman	1
Crawford	29	Marshall	31	Smith	10
Decatur	4	Meade	10	Stafford	20
Dickinson	42	Miami	21	Stevens	2
Doniphan	17	Mitchell	17	Sumner	33
Douglas*	789	Montgomery	53	Trego	4
Edwards	7	Morris	8	Wabaunsee	18
Elk	8	Morton	4	Wallace	2
Ellis	8	McPherson	29	Washington	19
Ellsworth	9	Nemaha	17	Wichita	1
Finney	3	Neosho	33	Wilson	19
Ford	11	Ness	9	Woodson	8
Franklin	21	Norton	5	Wyandotte	146
Geary	9	Osage	28		
Gove	1	Osborne	19	Counties, 98	2,587
Graham	4	Otawa	29		
Greenwood	11	Pawnee	9		

BY STATES.

Arkansas	4	Kansas	2,587	Oklahoma	44
California	3	Kentucky	1	Texas	4
Colorado	6	Louisiana	1	Washington, D. C.	1
Connecticut	1	Missouri	164	Washington	2
Idaho	1	Nebraska	4	Wyoming	1
Illinois	2	New Jersey	1	Japan	1
Indiana	1	New Mexico	8		
Iowa	2	Ohio	1	Grand total	2,840

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* A large number of students whose names appear as residents of Douglas county are so listed because they temporarily reside in Lawrence for the purpose of attending the University.

In my last biennial report I called your attention to the fact that for the year ending June, 1916, eighty-five colleges and universities, among which were 16 or more state universities, 4 agricultural colleges, 11 normal schools, and many denominational colleges and colleges on private foundation, were represented in the University of Kansas by students entering with advanced standing. For the year ending June 30, 1917, the number of institutions had increased from 85 to 97, and the number of students thus entering the University of Kansas from 220 to 293. Even under war conditions, in the year ending June 30, 1918, the number of institutions remained the same, but the number of students entering dropped from 293 to 281.

Other Institutions

FROM WHICH CANDIDATES FOR DEGREES WERE ADMITTED WITH ADVANCED STANDING, 1916-'17.

Institutions.	*Candidates.*
Avalon College	1
Baker University	19
Belleville College	1
Beloit College	1
Berea College	1
Bethel College	4
Butler College	1
Christian University	1
Coe College	1
Colorado State Teachers' College	1
Columbia School of Expression	1
Cooper College	2
Denver University	2
Dillenbeck School	1
Drake University	3
Drury College	1
Emporia College	6
Euphrates College	1
Fairmount College	10
Fairmount Seminary	1
Fort Hays Normal	7
Friends University	7
George R. Smith College	2
Greeley, Colorado, University	1
Harvard University	1
Haviland Academy	1
Henry Kendall College	1
Highland Park College	1
Hollins College	1
Illinois Women's College	1
Iowa State College	1
Iowa State Teachers' College	1
Kansas City Polytechnic Institute	9
Kansas City University	1
Kansas State Agricultural College	15
Kansas State Manual Training Normal,	7
Kansas State Normal	23
Kansas Wesleyan	8
Kingfisher College	1
Knox College	1
Lake Forest College	1
Leland Stanford	1
Lindenwood College	1
Lombard College	2
Midland College	5
Mills College	1
Miltonvale Wesleyan	1
Missouri Wesley College	1
Monmouth College	1
Monticello Academy	2
McPherson College	6
Nickerson College	2
Northwestern State Normal	2
Northwestern University	2
Oklahoma A. & M. College	1
Oklahoma Normal	1
Oswego College	2
Ottawa University	7
Park College	1
Phillips University	4
Randolph-Macon College	1
St. Joseph, Jr., College	1
St. Mary's College	1
Southwestern College	8
Southwestern Texas Normal	1
Spearfish Normal	1
Sweet Briar College	1
Tabor College	1
Talladega College	1
Texas A. & M. College	1
University of Arkansas	1
University of California	3
University of Chicago	6
University of Colorado	10
University of Florida	1
University of Illinois	1
University of Indiana	1
University of Iowa	1
University of Michigan	2
University of Missouri	6
University of Nebraska	3
University of Oklahoma	5
University of Oregon	1
University of the Pacific	1
University of Tennessee	1
University of Texas	1
University of Washington	1
University of Wisconsin	4
Valparaiso University	2
Ward-Belmont School	2
Warrensburg State Normal	3
Washburn College	22
Wells College	1
Whitman College	1
Whittier College	1
William Jewell	1
Yankton College	1
Candidates	293
Institutions	97

NOTE.—Candidates for degrees, included in above tabulation, who offered credentials from two or more schools, 31.

Other Institutions

FROM WHICH CANDIDATES FOR DEGREES WERE ADMITTED WITH ADVANCED STANDING, 1917-'18.

Institutions.	*Candidates.*
Arkansas College	1
Baker University	16
Barnard College	1
Beloit College	1
Bethany College	1
Bethel College	1
Bonebrake Theo. Sem.	1
Carnegie Institute	1
Central College	1
Christian College	1
Colorado College	2
Colorado School of Mines	1
Colorado State Teachers' College	2
Columbia University	1
Cooper College	1
Cornell University	2
Defiance College	1
Drury College	1
Emporia College	4
Fairmount College	12
Forest Park University	1
Fort Hays Normal	2
Friends University	10
Goucher College	1
Greeley, Colorado, University	1
Heidelberg University	1
Iowa Wesleyan	1
Kansas City Polytechnic Institute	14
Kansas City University	1
Kansas State Agricultural College	16
Kansas State Manual Training Normal	9
Kansas State Normal	24
Kansas Wesleyan	6
Lamar College	1
Lawrence College	1
Lebanon University	1
Lewis Institute	1
Lindenwood College	3
Mass. Inst. Tech.	1
Midland College	3
Miltonvale Wesleyan	1
Monticello Academy	1
Morningside College	1
Mt. Holyoke College	1
Muhlenberg College	1
McPherson College	4
National Park Sem.	3
Nebraska State Normal	2
Nebraska Wesleyan	2
Nickerson College	2
Northwestern College	1
Northwestern University	2
Oklahoma A. & M. College	2
Oklahoma Normal	1
Oklahoma School of Mines & Metallurgy	1
Oberlin College	2
Oswego College	2
Ottawa University	8
Park College	2
Phillips University	2
Salina Normal	1
Stout Institute	1
St. Joseph, Jr., College	2
St. Louis College of Pharmacy	1
St. Mary's College	1
St. Mary of the Wood	1
St. Thomas	1
Southwestern College	9
Southwestern Texas Normal	1
Talladega College	1
Tillotson College	1
Union College	1
University of Arkansas	1
University of California	2
University of Chicago	4
University of Cincinnati	1
University of Colorado	7
University of Maryland	1
University of Michigan	1
University of Minnesota	2
University of Missouri	6
University of Nebraska	1
University of Ohio	1
University of Oklahoma	2
University of Pennsylvania	1
University of Texas	1
University of Washington	2
University of Wisconsin	3
Valparaiso University	1
Ward-Belmont School	5
Warrensburg State Normal	2
Washburn College	18
Washington University	3
Wellesley College	1
Western Reserve University	1
Wilberforce University	1
Yankton College	1
Candidates	281
Institutions	97

NOTE.—Candidates for degrees, included in above tabulation, who offered credentials from two or more schools, 23.

SCHOLARSHIP.

The work of the University for the first year of the biennium on the whole was well done, as the war had not taken possession of the minds of the people sufficiently to cause a decline in interest in college subjects.

During the second year of the biennium the work of the University, in common with that of practically every other college and university in the land, was greatly affected by the war. The withdrawal of so many men for active service in the army, the sending of them abroad, the entering of the United States troops into the actual fighting, the additional anxiety as to the outcome of the war—all tended to make it very difficult for students and teachers to give their undivided attention to college work.

the University of Kansas experienced the effect described in the public press by the president of one of the great eastern universities, namely, the impossibility of concentration of mind upon the university problems when the great World War was in progress.

The University still maintains its position as a member of the Association of American Universities. It cannot expect, however, to maintain this position long in competition with other American Universities unless it is relieved from the present perilous position in which it finds itself as to salaries and equipment.

NUMBER AND WITHDRAWAL OF TEACHERS.

The number of teachers, administrators and laboratory workers on salaries during the year 1916-'17 was 243 and for the year 1917-'18 was 219.

The University during the first year of the biennium did not feel the stress of the war to any marked degree, but during the summer of 1917 and the academic year of 1917-'18 the drain upon the University for war purposes was very great. Some entered the active military service, notably the dean of the School of Engineering, who was made major of engineers, then promoted to position of lieutenant colonel, and finally to position of colonel and made a division engineer of the United States army, said to be the only division engineer not a member of the regular army. Others entered some service closely allied to the active military service, like the Y. M. C. A., into which went Dr. James Naismith, for many years head of the department of physical education; the United States Food Administration, which Dean Olin Templin, of the College of Liberal Arts, entered; the American Red Cross, which W. W. Davis, of the department of history, and Edward D. Osborne, of the School of Law, entered; and the war industries work of the Chamber of Commerce of the United States, which John J. Vander Vries, of the department of mathematics, entered. This list, both of those entering the military service and those entering civilian war work, might be greatly increased. By the end of June, 1918, 45 had secured leave of absence for this purpose. In addition a large number of the University teachers gave much of their time and attention to the other kinds of war work. In some cases it was necessary to fill the vacancies; in others the departments concerned assumed the burden of the additional work, thus making it unnecessary to fill the vacancy. This withdrawal of men kept pace in a rough way with the withdrawal of students to enter the war. The money saved was used to make up so far as possible for the greatly increased cost of material. The University, therefore, succeded in maintaining itself during the year, and passed the 30th of June, 1918, with a slight balance.

THE UNIVERSITY A WAR INDUSTRY.

Indeed, the University has rapidly been changing into a war industry. Important scientific investigations for the War Department have been undertaken by the scientific men of the University. Of course no publicity could be given to this matter. The State Council of Defense, with its committees and subcommittees, occupied a substantial part of the time of a large number of the University teachers and administrators. The department of home economics coöperated in the course offered in conjunction with the United States Food Administration. The United States fuel administrator for Kansas had the help of a University man as local fuel administrator. In many other ways the University has coöperated with the federal government.

To make clear both to the present time and to future generations the part the University of Kansas is taking in the World War, the war record of the University of Kansas was published in June, 1918, and has been sent to many universities in the United States, to public libraries and the public press and to the graduates and former students of the University. The showing made by this record is commendable, and in it more detailed information may be had in regard to the war work of the University. The resumé of this record, which it must be remembered was made up early in June, 1918, is as follows:

Resumé.

In Active Enlisted Service.	
Army:	
Infantry	633
Aviation	184
Artillery	160
Engineers	150
Medical officers' reserve	123
Sanitary corps	117
Signal corps	53
Ordnance	27
Cavalry	17
Tanks	2
Navy:	
U. S. N. R.	98
Signal corps	13
Aviation	8
Hospital corps	8
M. O. R. C.	2
Marines	18
	1,613
(Of these 818 are undergraduates.)	

In Other Branches.	
In allied services	70
Engineers' reserve	4
Naval reserve	19
Medical reserve	98
Medical reserve (affiliated)	79
	270
Total	1,883
Officers.	
Brigadier generals	2
Colonels	3
Lieutenant colonels	6
Majors	22
Captains	81
First and second lieutenants	480
Naval commander	1
Ensigns	3
Total	598

Since the war record of the University was made up the University of Kansas has entered more completely into war service, and now has for military, educational and special training the Students' Army Training Corps, whose quotas are as follows:

1.	Collegiate section	2,000
2.	Vocational section	450
3.	Naval section	200
4.	Marine corps section	140
5.	And it is hoped, although this is not yet decided, a band section of	200

These quotas, if filled, with their officers will total 2,500 men or more.

During the second semester of the University year 1917-'18, when it became evident that the war was making large inroads on the University because of the rapid calling of men into some kind of war service, it seemed necessary to take into consideration changes in the regular calendar of the University. Arrangements were made whereby students in good standing who had complied with certain necessary rules of the University senate, and who enlisted or were called into the service, were excused from completing the semester's work and given credit toward a degree. If they were seniors they received their degrees at commencement. If they were underclassmen they received credit toward a degree to be given later. The same arrangement was made for those who for *bona fide* reasons were necessary for the protection of the food supply. In addition the School of Law secured permission to close its sessions about April 1, and commencement day was moved up from June 9 to June 3, so that men students would be available for the wheat harvest, which began about the middle of the month.

SERVICE FLAG.

On commencement day, June 3, the University of Kansas unfurled its first service flag. On it were 1,655 stars, eight of which were gold stars, showing that eight graduates and students of the University had died in the service of their country in the great war. The list of those in the war from the University was then incomplete, and the number has constandly increased until it is now about 2,000.

It was found that all of the members of the graduating class of the School of Engineering were in the service and could not be present. A similar situation existed in a greater or less degree in all of the schools of the University. It was, however, a memorable commencement. The unfurling of the great service flag made a profound impression. The address by James W. Girard, late minister to Germany, was of very great interest, and the audience assembled to hear him was one of the largest ever seen at a University Commencement.

NUMBER OF HOURS WORK.

The pressure of work upon teachers of the University has increased during the biennium. The amount of time necessary to be given does not appear in the number of hours spent by teachers in the classroom. Modern university work, if rightly done, requires a large amount of preparation on the part of the teachers. To this must be added an increasing burden of work in the form of administrative or committee service. This problem of administrative work has proved a serious one to all large universities, and no satisfactory solution of the problem has yet been found. The University has sought in various ways to lessen the machinery of the institution. I am still of the opinion that the placing of departments on a committee basis as to administration to some degree relieves the strain.

SALARIES.

The situation of the University of Kansas in regard to salaries is very much worse at the present time than it has ever been in the history of the institution. It is nothing short of perilous. For many years the grade of salaries for administrative officers and teachers has been distinctly below that of other institutions of the same class. This has led to a constant, but until recently not a rapid drain on the institution. It is only common sense to say that to maintain itself an institution like the University of Kansas, considering the cost of living, the general situation of the institution, the cost of changing from one city to another, the amount of work required, and other factors, must maintain approximately the same standard of salaries as the institutions with which it must compete in the selection of teachers. While the situation in the University for years past has been distinctly disadvantageous, the war has greatly increased the difficulty. The greatly expanded cost of living, about which it is not necessary to argue, at once reduced the value of salaries, already below the standard, to a point where the burden was almost intolerable. In addition, University teachers and administrators saw salaries adjusted to meet this new situation in other institutions, in the public schools, in the railway service, in the trades and industries, and in practically all other activities where salaries or wages are paid. University people saw no such adjustment in the institution with which they were connected.

The war also greatly increased the demand for specially trained men and women in practically all avenues of university life. They were sought for in history, political science, economics, ancient language, sociology, psychology and other departments generally regarded as "unpractical" and associated with liberal arts culture alone. The better known scientific, engineering and medical departments of the University, representing in the minds of people the more definitely practical subjects, were more heavily drawn upon even than universities had expected. But another element entered into the situation which the University of Kansas never before has seriously felt. The difference between the salaries offered by the University and the salaries and earnings in other professions and in the practical vocations of life has begun to operate to the serious disadvantage of the institution in drawing men away from teaching. This affects not scientific and professional departments alone as it used to do, but other departments of the University of the pronounced liberal arts type, which were seldom, if ever, affected by the inducements of outside business life.

One of the teachers of the University drawing a salary of $3,500 was called to a professional position at a salary of near $7,000. Another drawing a salary of $3,350 was called to another university at a salary of $6,000. Another drawing a salary of $2,400 was called to a public position at a salary of $5,000. Another, in one of the most pronounced liberal arts departments, drawing a salary of $2,000, was called to a business position at a salary of $4,800. This list might be greatly extended. The result of this demand in other institutions and other fields of labor was an immediate and radical increase in salaries. There was no means in the University of Kansas of meeting this demand. The University had to look on helpless while other institutions and other callings took men which no state can see go with equanimity. We have been accustomed to say for years that higher salaries at the University are imperative. If there were a more emphatic word than imperative it would be used here. It is impossible for us to contemplate with equanimity the gradual disintegration of the institution because of the lack of reasonable and just pecuniary return for work performed. The real basis of dissatisfaction here is that the teachers and administrators of the institution are not getting a square deal. All administrative and teaching salaries must at once be adjusted to present conditions.

I hasten to say, however, that the Board of Administration appreciates this situation as fully as does the University, and has often protested against it, and I am entirely satisfied will make another determined protest to the next legislature with a demand that justice be done.

STATE WORK.

State work of the University continues much as in the past, and still constitutes a heavy burden on the salary budget of the institution. I would again renew my recommendation, viz., "That such an arrangement be made, under the authority of the legislature, with the State Board of Health as may make it possible to handle all of these interests with promptness and efficiency without curtailing the fundamental work of the University."

The University extension work develops every year. Especially is this true of the department of correspondence-study. In addition to state work, which the University has done for many years, the added responsibility of work more national in its character has come to the institution.

UNFORESEEN BURDENS ON THE BUDGET.

When the appropriations for the biennium ending June 30, 1918, was passed by the legislature no account was taken of the possibility of the United States entering the war. The result has been that unlooked-for burdens beyond the control of the institution have come upon the University in company with its sister institutions of the state. The cost of all material entering into the work of the University has greatly increased. The fuel bill of the institution is enormously greater than was figured on. The same is true of the cost of supplying the University with water.

NEW BUILDINGS.

The west wing and central portion of the new administration building are in the process of erection. They will not be finished until the spring of 1919. North College was vacated during the biennium, and is now being wrecked.

The need for buildings for specific purposes is still great in the University of Kansas. During the World War, for reasons of economy, the construction of new buildings must be strictly limited. There are, however, buildings so directly concerned with the operation of the whole plant or with the conduct of the war as to require consideration. Among these I respectfully call your attention to the following:

1. The development of the Rosedale plant for the teaching of clinical medicine. If there is one thing that the war has made clearer than another it is the absolute necessity for the development of medical schools and medical education. The demand from the War Department and the federal government on this point is the most insistent. The demand after the war is over will be as great as it is at present, and it is of the first importance for the conduct of the war and for the health of our people, and the consequent wealth production of our state after

the war, that all health agencies, especially that of the School of Medicine, be immediately placed on the highest standard of efficiency. The state should immediately enlarge the plant at Rosedale and add to the hospital and other teaching facilities.

2. Engineering and science. The war has made it clearer also that our facilities in engineering and in the scientific departments be very greatly increased. Therefore, at the earliest possible moment further building and laboratory facilities should be had for the development of this class of work.

3. The need for a good heating and power plant is very pressing. The present equipment is already forced to its limit, much of it is old and out of date, and the University faces a breakdown in a plant without which it is impossible to run the institution. Even now no further boiler capacity is possible without extension of the boiler house. When the new administration building is connected up a considerable extension of the old plant will be necessary. It would be very poor economy to keep extending an old and partially worn-out plant in connection with a building entirely unsuited to the purposes of a modern university. Then, too, the centralizing of the power plant and heating plant in one central unit ought to have immediate favorable consideration.

4. The war has forever settled the question of the importance of colleges and universities in our country. This has reference not only to medicine, engineering and scientific work, commonly so called, but to all other university work that trains men to think. The war brought a most insistent demand upon the whole country for officer material from colleges and universities that had been trained to think quickly and accurately. Young men without a college education who had neglected the opportunities at hand found themselves shut out from a career in the army which otherwise might have been theirs. They found that in order to enter the Students' Army Training Corps and be in line for an officer's commission, graduation from a four-year high school was necessary. They found that in order to enter the marine corps section of the S. A. T. C. one must be of college sophomore standing or better. They found that in aviation there was little chance for men who had not passed through a standard high school and the greater part of a standard university course. We must expect, therefore, that when the war is over there will be a tremendous influx into colleges and universities. Kansas will be wise if it makes ready for the time after the war. Buildings and equipment will be more than ever necessary and their preparation should have consideration now.

RISK OF FIRE LOSS.

The University has but one fire-proof building; that is, the new building for administration and College of Liberal Arts. The book stacks in the Spooner library are supposed to offer some protection against fire, but this protection is very inadequate. It was thought when the museum of natural history was contracted for in the spring of 1902 that it would be a slow-burning or partially fireproof building. There is little question that these hopes were not well founded. Otherwise in the University there has been no attempt at fire protection through the method of building. In case some of these buildings should be destroyed by fire, they, with their equipment, in a reasonable time could be replaced without difficulty. There are, however, two buildings the loss of which with their contents would be irreparable. They are the library, with its stock of 125,000 volumes, and the museum of natural history, with its collections valued at from $300,000 to $400,000. To replace a library of 125,000 volumes would now be extremely difficult; to replace the collections in the museum would be entirely impossible. That loss could never be made up either to Kansas or to the world at large.

PERMANENT BUILDING PLAN.

The University has suffered very greatly in not having a permanent building plan. In order to secure this a running appropriation of a given amount for a series of years is necessary. Other institutions have followed this plan with very great success. A smaller amount of money coming in every year for building purposes would enable the University to take care of its needs better than a somewhat larger amount appropriated spasmodically and without plan.

BUDGET.

It is impossible to make an itemized budget at this time to be presented to the legislature for its action in January, 1919. Unusual difficulties confront the University in making such a budget for the next biennium. The uncertainty as to the duration of the war; the greatly changed aspect of the University itself and the reorganization of work of American universities, which seems certain to follow the war; the changing cost of materials and changing grade of salaries, all together make budget making a difficult matter. In general it is clear that the salary schedule of the institution, including all administrative officers and teachers, must be largely increased. The teaching force must be restored, in numbers, and even increased, because of the heavy strain brought by the Students' Army Training Corps. Equipment in the way of buildings and apparatus must be had, for the reason that the appropriations of the last two bienniums have not been sufficient to thoroughly replace old apparatus and equipment and keep pace with the increasing demands. The appropriation for needed repairs and improvements must be increased to prevent further deterioration of the buildings of the University.

Finally, the University of Kansas at this writing has definitely and directly entered upon war work. All of its energies are bent toward helping our country and its allies win the war for a just and lasting peace.

Respectfully submitted.

FRANK STRONG, *Chancellor.*

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BIENNIAL RERORT

OF THE

KANSAS STATE AGRICULTURAL COLLEGE

MANHATTAN, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Governor.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

RESIDENT OFFICER:

W. M. JARDINE.................................President.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1919
7-5218

REPORT OF THE PRESIDENT.

To the Board of Administration:

I have the honor of transmitting to you herewith a report of the work of the Kansas State Agricultural College for the biennium ending June 30, 1918.

ENROLLMENT.

During the year 1916-1917, the College had an enrollment of 3,340, an increase over any previous year. This figure does not include the large number of students taking extension courses. The following year the attendance was reduced as an effect of the war; the total number of students for 1917-1918, but not including those in extension courses, was 2,656.

The following table shows the attendance by classes during the biennium. For comparison the figures for the preceding year are included also:

	1915-1916.	1916-1917.	1917-1918.
Graduate students	76	68	36
Seniors	401	282	238
Juniors	305	378	294
Sophomores	454	471	349
Freshmen	605	693	483
School of Agriculture	484	422	231
All short courses	497	536	354
Special students	175	171	138
S. A. T. C. vocational section	...	...	250
Summer School	536	586	481
Totals	3,533	3,617	2,846
Counted twice	219	277	190
	3,314	3,340	2,656

The following table shows the attendance for 1918-1919 has increased over the corresponding period of last year:

	1917-1918 (first semester, complete).	1918-1919 (first semester, to Oct. 5).
Graduate students	29	26
Seniors	222	175
Juniors	271	207
Sophomores	316	275
Freshmen	435	792
Special students	84	73
School of Agriculture	191	184
Housekeepers' course	54	16
Lunchroom management	8	...
S. A. T. C. vocational section	...	1,030
Total of men	840	2,111
Total of women	770	667
Grand totals	1,610	2,778

As the figures for the fall semester of 1917-1918 are complete, whereas the figures for the first semester of 1918-1919 are carried merely to October 5, the total increase for the semester will be greater than is here shown. Even without this further increase the figures for the fall of 1918 exceed by 466 those for the fall of 1916-1917, in which year the College had its largest enrollment.

CHANGES IN PERSONNEL.

The scarcity of man power and the increased demand resulting from the war have been felt in the College faculty and in Extension and Experiment Station staffs. There has been a considerable loss in personnel because of men entering the armed forces of the United States. Strong inducements in increased salaries and privileges offered to members by other institutions have caused the loss of a still greater number. Salaries have been increased in so far as the funds of the institution would permit, but it has been possible to retain many because of their loyalty to the College and sense of duty in the war, rather than through the ability of the institution to meet the financial inducements offered. During the past year and since the entrance of this country into the war 138 men of college rank have left the institution. Of these 51 entered the army or navy and 82 accepted more remunerative positions elsewhere or went into business. Twenty-seven women of college rank left the institution in the past year, 13 of whom accepted more remunerative positions elsewhere.

The diminution in the total number of students in the institution has made it possible to reduce to more suitable size many classes which for some time have been entirely too large for effective teaching. This, together with the added duties incident to the war, which have come to many members of the College staff, has prevented the appearance of any problem concerning superfluous teachers. A few readjustments have been made, but voluntary resignations have more than kept pace with any falling off of requirements for teachers.

In the employment of members of the faculty it is becoming increasingly difficult, not only to find properly qualified teachers, but to obtain them at the salaries which our budget will permit. It has become almost useless to attempt to obtain men as teachers for positions which women can fill. The Division of Engineering and departments of physics and chemistry have been especially affected by the developments of war. These are lines followed almost exclusively by men; therefore the situation is not relieved by the possibility of employing women. In several lines of research work men have been lost, and it being impossible to replace them, the work has been discontinued.

THE STUDENT AND THE WAR.

The work of teaching has been affected materially by the existence of war. The attitude of the students is noticeably different. They are interpreting their college studies and activities in their relation to winning the war or ameliorating the distress accompanying and resulting from war. They are more serious of mind, and their college work, if it is to command their attention, must be practical and show a distinct relationship with present world conditions and needs. The courses of this institution, in common with other land-grant institutions of the country, were, generally speaking, well suited to meet the emergency and to carry out the government's war program. Where courses needed redirecting the proper modifications have been effected.

COLLEGE EXTENSION.

Aside from the training of young men and women in the College, the outstanding feature of the work of the institution for the biennium has been its close articulation with the agricultural life of the state. Upon our entrance into the war the national government found in the Kansas State Agricultural College, with its large extension staff of specialists, boys' and girls' club workers, county agents, women agents, and with its close touch with county farm bureaus, a splendidly equipped machine ready to put into execution the national war program of increased agricultural production and food conservation. The personnel of the Division of College Extension increased more than 200 percent during the biennium. There were five departments at the beginning of the biennium and eight at the end. While there were twenty farm bureaus served by county agents at the beginning of the biennium, there were forty-four bureaus so served and eighteen districts of two or more counties each served by emergency agents at the end of this period. There were twenty-six women in home demonstration work and twenty-four men and women in the boys, and girls' club work at the close of the biennium. The farm bureaus and the county agents have been the most effective agencies through which the government has been able to conduct its agricultural war programs in the country. In addition to extension workers, many members of the teaching faculty and of the Experiment Station staff have devoted time to extension activities and war service. Through the Division of College Extension the institution has made the whole state its campus and influenced every community in the interests of a better agriculture.

WORK WITH THE STATE COUNCIL OF DEFENSE

The Agricultural College has been the chief agency in carrying out programs of the State Council of Defense. A comprehensive survey of the state's agricultural resources was made in the spring of 1917 and again in the spring of 1918, these surveys being necessary because of seed and labor shortage and the need for planting the maximum acreages to spring crops. The survey of 1918 was made with the help of the rural school children, who went among the farmers and learned what supplies of seeds were available, what supplies were needed, and also the labor available and labor needed. Samples of the various seeds held for sale, as well as those which the farmers intended planting, were collected by the children. These samples were tested for germination by the school children and also by the Agricultural College; a total of 16,836 samples of seeds being received by the College for testing.

Through this survey the labor needs of the state were definitely learned and steps taken to insure the harvesting of the 1918 wheat crop. A campaign was carried through for the enlistment of men and boys in the towns and cities to help in the harvest. Early in the spring the College led in the work of enlisting high-school boys in the United States Boys' Working Reserve. A pamphlet dealing with elementary farm operations was issued and placed in the hands of every teacher of agriculture in the state. The boys were prepared to render effective aid in the wheat harvest as well as in other seasons. As a result of all activities covering the labor situation the harvest of 1918 was handled more satisfactorily and with less loss of grain than in normal times.

Through the efforts of the farm-labor specialist, county agents, and farm bureaus, a wage scale for harvest labor, effective throughout the wheat belt, was agreed upon by the farmers. This was the first attempt of any state to establish a uniform harvest wage scale and was eminently successful, not only in preventing destructive competition for labor, but in supplying labor at a good wage to those who wanted work. County agents also assisted in bringing farmers and threshermen together to agree on suitable prices for threshing. They helped to inspect threshing machines to see if clean work was done and had charge of the threshermen's reports required by the government.

In June, 1917, the College sent out a force of twenty men to inspect fields of hard red winter wheat, in order that a sufficient supply of good seed might be insured for the fall planting. Practically all of the fields of good wheat in twenty-six counties in the south central part of the state were examined and a total of 4,800,000 bushels of good seed were listed for sale.

The gardening campaigns conducted by the Division of College Extension, in coöperation with the State Council of Defense, resulted in 1917 in an increase of more than 100 percent in the areas devoted to gardens. In 1917, 236,679 quarts of canned products were prepared by the mother-daughter canning clubs alone, and the stimulus thus given to the canning and preservation of food was state wide and of untold value, both from the standpoint of food conservation and of education.

The president of the State Council of Defense, the chairman of the committee on agricultural production, the federal home economics director for Kansas, the secretary of the State Speakers' Bureau, the state director of coöperation in the United States Boys' Working Reserve, were all members of the College staff and gave liberally of their time to war service. In addition, twenty-nine members of the extension and Experiment Station staffs were among those composing the personnel of the subcommittees of the committee on agricultural production of the State Council of Defense. The subcommittees kept the press supplied with timely articles covering every phase of agricultural production.

A member of the College faculty is acting as educational director of one of the largest districts into which the United States has been divided by the War Department Committee on Education and Special Training. He is also associate member of the Naval Consulting Board and director for industrial preparedness for Kansas.

The Agricultural College furnished copy for the following circulars of the State Council of Defense:

Circular 1. Plant Only Tested Seed
2. Seed List, April, 1917.
3. Canning Instructions.
4. Home-Made Apparatus for Drying Fruits and Vegetables.
5. List of Inspected Seed Wheat, July, 1917.
6. How to Prepare Ground for Wheat, and Time to Sow.
7. Suggestions for Teachers Giving Practical Instruction to City Boys.
    (*a*) Care and Handling of Work Horses.
    (*b*) Care, Adjustment and Use of Farm Machinery.
    (*c*) Care and Handling of Dairy Cows and Milk.
8. Speaker's Handbook No. 1.
9. Use of Wheat Saving Cereals.
10. One-Dish Meals.
11. Seed List, March, 1918.
12. Speakers' Handbook No. 2.
13. Silos in War Time.

WAR SERVICE IN ENGINEERING.

The Division of Engineering has taken an active and leading part in aiding the country in the present emergency. It has acted in a consulting capacity in connection with various engineering problems as they have arisen in the state, and particularly in connection with the national army cantonment at Camp Funston. It has manufactured practice grenades and inclinometers for the United States army and made difficult repairs upon engines and machinery sent to the College from Camp Funston. The division gave intensive courses to about 800 men of the motorized regiment from Camp Funston during March, April and May, 1918. Courses in radio, electricity and telephony were given through the year 1917-1918 to classes formed of students of draft age expecting to be called into the service.

From May 15, 1918, to July 15, 1918, 250 men from the national army were trained as auto mechanics, electricians, radio operators, and in other lines related to the mechanic arts. This number was increased to 515 beginning July 15, 1918. Men from the national army in groups of 515 have been and are now being trained along engineering lines in the engineering laboratories of the College. These intensive courses will be continued through the summer, as well as through the winter, as long as the war lasts, and possibly during the reconstruction period. The College has now a contract with the War Department to train 2,490 men before May 15, 1919.

OTHER ENGINEERING SERVICE.

As in former years, the Division of Engineering gave free instruction to the operating engineers of Kansas. In conjunction with the State Highway Commission a road school was held for county highway engineers. More than fifty county engineers were benefited by this school. The engineering laboratories of the College are the official testing laboratories of the Kansas State Highway Commission and are testing all material for the federal-aid roads of the state. Members of the faculty of the Division of Engineering aided in the fuel conservation campaign during 1917-1918 and coöperated with the National Safety Council.

THE ENGINEERING EXPERIMENT STATION.

The Engineering Experiment Station of the Kansas State Agricultural College conducts original research tests and experiments, furnishes information, and compiles data in engineering and in the other branches of the mechanic arts with particular regard to the national needs in the present emergency as well as the direct needs of the state. Bulletins completed and published during the biennium cover the following subjects: The Water Supply of the Farm House; Sewage Disposal for Country Homes; Inexpensive Plumbing for Farm Kitchens; The Farm House Improved; Economical Use of Fuel in the Home; and Electric Cooking Appliances.

AGRICULTURAL EXPERIMENT STATION WORK.

The results of Experiment Station investigations in crop and livestock production and in farm management have been carried to the people through the extension activities of the institution and incorporated into the agricultural practice of the state. Results of experimental studies, developed in advance of the procession of events, have made possible the present degree of efficiency in the state's agriculture.

Extensive experimental feeding work with cattle, hogs and sheep has demonstrated the possibility of finishing these livestock for market at a profit in spite of the exceedingly high prices of feeds. Hog cholera has been kept under control by means of the anti-hog-cholera serums developed by the station, and increased pork production was made possible through conservation. The extent of the work in hog-cholera control is indicated by the fact that the College manufactured and distributed throughout the state during the biennium 3,318,765 cc. of serum and 78,670 cc. of virus. Much progress has been made in developing and extending the use of germ-free blackleg vaccine. During the period 1916-1918 no fewer than 55,000 doses of this material were distributed throughout the state by the Experiment Station.

Kanred wheat has continued to manifest a marked superiority to the old varieties of hard red winter wheat in earliness, winter resistance, tillering habit and yield. In the eight years it has been under test Kanred has yielded an average increase per acre over Kharkof and Turkey of from two to five bushels. Since 1916 it has been grown on a field scale by different farmers in the state and has been kept pure. Enough seed of Kanred will be available to plant approximately 50,000 acres the fall of 1918. This will mean an increase in the value of the Kansas wheat crop for 1919 of from $200,000 to $500,000.

For details concerning the work, accomplishments and needs of the Agricultural Experiment Station I would refer you to the section of this report under the head of "Agriculture," and to the director's report for 1916-1917, which has just been published.

INCREASED COSTS.

The following table taken from the August, 1918, issue of the Monthly Labor Review of the Bureau of Labor Statistics, United States Department of Labor, shows authoritatively the rise in costs of all commodities for the past three years:

Index Numbers of Wholesale Prices, by Groups of Commodities, 1913, to June, 1918.

	1913 average.	1914 average.	1915 average.	1916 average.	1917 average.	1918	
						January.	June.
Farm products	100	103	105	122	188	205	214
Food, etc	100	103	104	126	177	188	180
Clothes and clothing	100	98	100	127	181	209	243
Fuel and lighting	100	92	87	115	169	169	171
Metal and metal products	100	87	97	148	208	173	177
Lumber and building material,	100	97	94	101	124	136	148
Chemicals and drugs	100	103	113	143	185	216	205
House-furnishing goods	100	103	101	110	155	188	192
Miscellaneous	100	97	98	121	153	177	198
ALL COMMODITIES	100	99	100	123	175	185	193

SALARIES.

On the basis of the increased costs as shown in the foregoing table, a man who in 1915 was receiving a salary of $1,200 a year should have been paid in 1916, $1,476. In 1917 he needed $2,100 to be able to live on the same scale as on $1,200 in 1915. By June, 1918, $2,316 a year was of no higher value to him than was his $1,200 salary in 1915. Since June, 1918, the dollar has still further depreciated. And the average price of all commodities will remain high for years after the war ends.

To equalize matters every salary of $1,000 in 1916 should be $1,500 now, and other salaries should be raised in proportion. Our college instructors are usually men of family and feel keenly the pinch of higher costs. In addition to the higher costs of living as indicated above, college people are expected to give and do give freely of their funds and time for war work and needs. If their salaries were raised fully to the scale indicated in the government table of commodity costs, if their salaries for 1915 were doubled for 1919-1920, they would still not be so well off as then because of the large outside demands for funds.

BUILDINGS AND IMPROVEMENTS.

There has been for a number of years an imperative need of adequate housing for the department of physics, which is now occupying crowded quarters in the chemistry building, together with the department of electrical engineering. The last legislature attempted to provide for this need by appropriating $50,000 for an addition to the old agricultural building. Owing to the greatly increased costs of all building materials, as shown in the preceding table of commodity costs, the amount appropriated was found to be wholly insufficient. It was necessary to delay construction until the next legislature could be asked to provide an additional sum. It is asked that the sum of $50,000 be reappropriated and $30,000 added for the construction of a physics building.

With the present building equipment of the Division of Engineering there is no adequate space for laboratories for the work in farm engineering and no suitable housing facilities for farm machinery. Farm engineering is a department destined to rapid growth and development. The traction engine and the truck have become permanent and essential parts of farm equipment. The chief difficulty that has stood in the way of their successful use on the farm has been the lack of knowledge on the part of farmers as to how to operate and care for them. One of the functions of this institution is to provide training in the use and care of modern farm power machinery. During each year of the past biennium no fewer than 600 agricultural students have taken courses in traction engines and other farm-engineering subjects. Engineering students also take these courses in preparing themselves for instructional work in farm engineering.

The department of electrical engineering is also inadequately provided for. The inspectors of the War Department objected to the quarters used for training electricians, and the institution was unable to comply with the repeated requests that came for the College to train telephone electricians for the army. The College has a well-trained and experienced faculty and good engineering equipment, but space is lacking. A suitable addition to the present engineering building will greatly increase the effectiveness of the institution in the present emergency, and will place it in a better position to serve the people of Kansas during the reconstruction period after the war. An appropriation of $75,000 is asked for the completion of the engineering building.

The sum of $30,000 should be appropriated for coal storage and for coal-handling machinery in connection with the College power and heating plants. The College is using too much man power. Proper coal-handling machinery will return an interest of about 17 percent on the investment. Coal storage is also a serious problem on account of spontaneous combustion. Concrete storage bins will eliminate this danger and will enable the College to purchase its coal supply during the most favorable season of the year.

The sum of $10,000 is asked for the erection of a suitable hog plant. The present accommodations for this work are scattered, inconvenient and unsightly. The hog-production phase of the livestock industry of Kansas is of great importance. The experimental work of the College with hogs is invaluable in the development of the industry in the state and deserves proper facilities for housing and equipment.

The last legislature created the Kansas State Highway Commission and named the engineering laboratories of the Kansas State Agricultural College as the testing laboratories of the commission. No appropriation was made for additional men or for equipment, and the expense of testing road materials for the state has come out of the funds appropriated for the maintenance of the Division of Engineering. The instructors of the Division have done the testing work for the commission in addition to their teaching, war work, and regular research activities. Kansas is spending during the present year $11,000,000 on roads. After the war the construction of improved public highways will be far more extensive than ever before. Lack of good roads is the great obstacle to progress in agriculture. Kansas highways must be improved so that motor power can be used in transporting farm products to market and supplies to the farm, economizing in the use of man power and time. The Agricultural College should take the lead in the work of road improvement. Funds should be available for the employment of a sufficient number of assistants to test promptly the samples of road materials as they are received and to enable the Division of Engineering to render the greatest possible aid to the work as a whole. The sum of $10,000 a year is asked for the maintenance of the road-testing work during the biennium.

REQUESTS TO THE LEGISLATURE.

After a careful study of the situation it is evident that to even maintain the institution on its present basis of operation, not making any provision for growth and expansion, an increase of 25 percent in salaries and wages, 30 percent in maintenance, and 50 percent in improvements and repairs, over the appropriations for the past biennium, is absolutely necessary for each year of the coming biennium.

These increases are urgently asked, that the institution may not deteriorate, but may maintain its present efficient staff of instructors and be ready, immediately when the war is over and our young men return to college, to resume all the normal functions of one of the state's institutions of higher learning. There must also be no decline in the research and experimental work if the agriculture of the state is to be maintained on its present high plane and the increasing demand for scientific, agricultural and engineering information is to be met.

The following table shows the total appropriations asked for the biennium ending June 30, 1921, compared with the appropriations for the past biennium:

ITEMS.	Appropriations.		Appropriations requested.	
	1918.	1919.	1920.	1921.
Salaries and wages	$347,500	$347,500	$434,375	$434,375
Maintenance of all departments, extension, etc	187,000	187,000	243,000	243,000
Repairs and improvements	25,000	25,000	35,000	35,000
President's contingent fund	500	500	500	500
Addition to old agriculture building (not used)		*50,000		
For purchase of land	80,000			
Additional appropriation for physics building			30,000	
Addition to engineering building				75,000
Hog plant			10,000	
Testing road materials			10,000	10,000
Totals	$640,000	$610,000	$762,875	$797,875
*Reappropriated for construction of a physics building			$50,000	

BRANCH AGRICULTURAL EXPERIMENT STATIONS.

The Garden City Branch Station is located in the deep-well irrigation section of the state. This section is only beginning to be developed and offers wonderful possibilities. The station studies on the cost of lifting water, method of distributing it over the land, furrow irrigation compared with flooding, the time to apply water, value of winter irrigation compared with summer and spring irrigation, and amount of water to apply to different kinds of crops adapted to the region, need to be extended. The use of electricity for power in operating pumping plants is growing, and many questions are rising in connection with the comparative cost of electricity and oil for fuel. The pumping plant at the station should be equipped for pumping with electricity, in order that comparative studies may be made on the use of electricity and oil for power. To install the necessary electrical machinery will cost not less than $2,500. The legislature is asked to appropriate this sum for this purpose.

The expansion in the investigative work of the Garden City Branch Station will increase the costs of operation, and additional funds will be needed for maintenance. It is asked that the appropriation of $5,000 a year allowed by the last legislature for the maintenance of the Garden City Branch Station be increased to $6,000 a year for the coming biennium.

The same appropriations are asked for the maintenance of the Fort Hays Branch Station, and the Colby Branch Station as were allowed for the past biennium. For the Tribune Branch Station, an appropriation of $2,500 per year is asked for the biennium.

For details as to the progress made in the different divisions of the College and as to the needs for the coming biennium I refer you to the following abridgements of the reports submitted by the several deans.

AGRICULTURE.

COLLEGE WORK.

The number of students who have been graduated from the curricula in agriculture and veterinary medicine has now reached a very considerable figure. From 1910 to the spring of 1916 a total of 484 students were graduated from these curricula. During the years 1916-'17 and 1917-'18 the number of such graduates was 136. In normal times approximately one-half of the students graduating engage in practical farming. At present most of those who are not temporarily in the military service are engaged in some kind of productive agricultural work, such as teaching, extension or investigation. These graduates are distributed throughout Kansas and practically every other state in the Union. Their influence for constructive development in agriculture and rural life is incalculable.

Each year a number of students enroll for graduate work in order to prepare themselves for service in technical agricultural subjects. During the past biennium twenty-nine students pursued graduate courses in agriculture or veterinary medicine. These students help to build up a force of trained experts to assist in the solution of fundamental agricultural problems in Kansas and elsewhere. A number of new courses were added to the curricula in agriculture and veterinary medicine during the biennium to meet the needs of these graduate students and to strengthen the instruction of undergraduates.

THE AGRICULTURAL EXPERIMENT STATION.

THE EXPERIMENT STATION AND THE WAR.

The work of the Kansas Agricultural Experiment Station is all aimed directly or indirectly to benefit agriculture. Agriculture forms the basis of the national welfare; this fact is especially evident in time of war. When this country entered the war in April, 1917, the Kansas Agricultural Experiment Station was prepared to render immediate and invaluable service. The organization and character of the work of the Experiment Station in peace times were such that only slight modifications were necessary to make it of immediate value in time of war. It is difficult to differentiate clearly between the regular service and the war service of the station, as the two merge so completely.

The war work of the Agricultural Experiment Station has been necessarily interwoven with that of the Kansas State Council of Defense. The station was found to be the natural agency through which changes and intensifications in the agriculture of the state might be effected. Eighteen members of the station staff have rendered active service in the work of the committee on agricultural production of the Council of Defense. At times the attention of entire departments has been centered upon the problem of determining the most effective means for increasing food production.

Of the 8,887,000 acres of winter wheat planted in Kansas in the fall of 1916, 4,908,000 acres were destroyed by winterkilling, drouth, and soil-blowing. The first task under war conditions was to get the maximum amount of this abandoned acreage into spring crops. A preliminary survey was made of the state's agricultural resources, and information was obtained on the area of idle land, the best crops to plant, the labor situation, the available seed supply, and other important questions. The information assembled regarding available seed was printed and given wide distribution. The information was of great practical value to farmers and aided materially in securing the planting of a maximum acreage. The destruction of the wheat crop in at least thirty-five counties where hard red winter wheat is usually grown, and the questionable quality of much of the wheat produced, made it essential that fields of pure hard red winter wheat be located if an adequate supply of pure seed was to be available for planting in the fall of 1917. A personal inspection of fields of wheat was made by a force of twenty men, thirteen of whom were members of the station staff. These men devoted a total of 229 man-days in this inspection work.

Practically all the fields of good wheat in twenty-six counties in the south central part of the state were examined. The results of this inspection were tabulated and published, giving the names and addresses of farmers having seed wheat for sale. This list included a total of about 4,800,000 bushels of seed of hard red winter wheat suitable for planting, and aided farmers greatly in securing good seed for planting in the fall of 1917.

The foregoing work on the agricultural survey and on the seed wheat supply illustrates in a general way the character of much of the war work of the station. During the biennium similar activities were prosecuted in stimulating the annual industries of the state.

The demands of the war for increased public service on the part of the members of the station staff have been very heavy. The work they have been called upon to do has varied widely, including addresses at meetings of farmers and farmers' associations, expert advice and assistance in connection with the location and selection of improved livestock, the solution of farm-management problems, the prevention and control of animal diseases, judging at fairs, landscape gardening, and other farm interests. In addition to public addresses delivered and expert personal services rendered, there has been a very large volume of correspondence with individual farmers and farmers' associations relative to every variety of agricultural problems

The Experiment Station staff appreciates the opportunity which has been afforded to prove its capacity for constructive practical effort in connection with the war emergencies. National needs will continue to receive its first attention. However, it is essential that the future agricultural interests of the state be safeguarded in so far as is possible. The service which the Experiment Station is now able to render is due largely to the fundamental and continuous research work which has been done since the station was established. To overlook the necessity of continuing the scientific investigational work respecting the principles and applications of agricultural science, as a preparation for the great reconstruction period which must follow the war, would endanger the future national welfare. Many different influences have tended to disrupt experimental work since war was declared. Many members of the station staff have resigned to enter military service, to engage in federal civil service, to accept positions with commercial firms, and to take appointments with other state agricultural colleges and experiment stations. A number of the members of the station staff have been granted leave of absence for government service during the war or as long as station workers should consider carefully the possibilities for national service in their present positions. It may be necessary for them to make temporary sacrifices in the interest of national service as well as to prevent serious deterioration of research work.

Most of the work of the experiment station is of such a nature that its value and usefulness depend largely on its continuance without interruption for a series of years. In most instances the results secured each year in a particular inquiry, while they form only a part of the solution of the main problem under investigation, furnish some valuable information which can be given immediate practical application by Kansas farmers. Hence it is highly important from the standpoint of immediate usefulness, as well as for their future value, that these investigational projects be maintained continuously. Effort has been made to maintain these investigational projects in spite of the demands for special service in connection with war emergencies, but it has been necessary in some instances either to discontinue a line of work temporarily or to make modifications in it for the period of the war.

PROGRESS IN EXPERIMENT STATION WORK.

Generally speaking, the lines of work which were in progress two years ago have been continued without material modification except where investigations have been completed or where war conditions have made it necessary to discontinue or modify a particular line of work. A brief statement of some of the more important features of the work of the station during the biennium follows.

PLANT INDUSTRIES.

The work of the Experiment Station with reference to plant industries during the past biennium has included work with small grains, corn and forage crops, horticultural and forest work, and numerous investigations looking towards the control of plant diseases and insect pests. Other activities directly related to the plant industries of the state have to do with the farmers' seed supply, milling investigations, the eradication of injurious mammals, and the licensing of the intrastate trade in commercial fertilizers.

KANRED WHEAT.

One of the most prominent features of the Experiment Station work during the past biennium is that relating to the new variety of winter wheat produced at the Experiment Station and known as Kanred. This variety has continued to produce striking increases in yield as compared with Turkey and Kharkof, formerly the best known varieties for the hard winter wheat sections of Kansas. As an average for the seven-year period, 1911 to 1917, inclusive, during which Kanred has been under test at the Experiment Station at Manhattan, it has yielded 29 bushels per acre as compared with 24.5 bushels for Turkey and 24.3 bushels for Kharkof. In 1916 Kanred was grown on 21 Kansas farms, where it was possible to secure an exact comparison in yield between this variety and the farmers' own wheat. As an average of these tests, Kanred produced 26.3 bushels per acre as compared with 20.4 bushels produced by the local varieties, a difference of 5.9 bushels in favor of Kanred. In 1917, in similar tests conducted on 11 Kansas farms, Kanred produced an average of 23.7 bushels per acre as compared with 20.8 bushels produced by local varieties, a difference of 2.9 bushels in favor of Kanred. During the fiscal year 1916-'17 Kanred was grown on a field scale by 20 Kansas farmers, so that in the fall of 1917 there was available for distribution, in addition to the seed requirements of these farmers, 4,308 bushels of pure seed of this improved variety. This seed was distributed in amounts not exceeding 20 bushels to farmers throughout Kansas. In 1918 between 200 and 300 farmers grew this variety. Previous to the harvest of 1918 Kanred wheat was inspected in the growing fields on 98 farms located in 22 counties of the state. The area of Kanred wheat inspected was 1,825 acres and the estimated yield of inspected fields was 27,830 bushels. It is estimated that of this quantity 19,660 bushels will be available for seed in the fall of 1918 and that between 10,000 and 12,000 bushels of additional seed will be available from farms which were not inspected. Approximately 50,000 acres of this improved variety of winter wheat will be seeded in Kansas during the fall of 1918. Kanred gives indication of being superior in earliness, winter resistance, tillering habit and yield to the older varieties of winter wheat grown in the main hard winter wheat sections of the state, and will undoubtedly gradually displace them.

COÖPERATIVE EXPERIMENTS.

The variation in soil and climate in different parts of Kansas makes it necessary to extend the studies of the main Experiment Station and the branch stations to all parts of the state before results can be considered conclusive and safely applicable in farm practice. In the coöperative experiments with farmers, begun in 1911, fertilizer and tillage requirements and crop adaptations of the various soil types of the state are being determined with respect to existing climatic conditions. During the past biennium the College coöperated with farmers in making crop-production tests in 80 different Kansas counties. These tests included 388 variety tests of corn; 243 variety tests of sorghums; 136 variety tests of wheat; 56 date-of-seeding tests with wheat; 144 fertilizer tests with wheat, oats, corn and alfalfa; nine rotation and fertilizer projects; 133 miscellaneous crop-production experiments; and 282 tests in which improved varieties of crops were grown for the production of seed for increased planting.

As a result of coöperative experiments with farmers it has been demonstrated that Kanred is a superior variety for all the soil types throughout the hard-wheat-growing sections of the state, but that Fulcaster and Harvest Queen are the best varieties of wheat for the eastern soft-wheat section of Kansas. The results of the coöperative fertilizer tests show that the fertilizer requirements of eastern Kansas soils differ. There is need for much additional investigation of the fertilizer question, but the results obtained indicate that soils derived from shale or sandstone are deficient in phosphorus and that fertilizers supplying this element of plant food can be used profitably on such soils for winter wheat, alfalfa and clover, less profitably for oats and kafir, and very seldom with profit for corn.

SEED SUPPLY.

The Experiment Station has continued its work in distributing small quantities of pure seed from the central farm at Manhattan. It is not the purpose of the station to engage in this work in a commercial way, but rather to distribute limited quantities of surplus seed of improved and adapted strains to farmers who desired to secure pure seed of high quality. The following quantities of seed were distributed during the last two fiscal years:

	Bushels.
Wheat	4,063
Kafir	657
Sorghums	377
Corn	357
Oats	115
Sweet clover	13
Sudan grass	45

Besides this distribution of pure seed from the station, the College is endeavoring to assist farmers in securing good seed from other farmers of the state who may have a surplus for sale. The agronomy department prepared printed lists from time to time, giving the names and addresses of farmers who have seed for sale and the kind, variety and quantity available. This work has been particularly important since this country entered the war. Mention has already been made of the extensive inspection of winter wheat seed in 1917, in which 4,800,000 bushels of seed suitable for planting was listed. Since then similar seed lists of other crops have been issued, but the seed has not always been inspected. The quantities of seeds so listed during the biennium are indicated in the following table:

Crop.	Bushels.
Wheat	4,829,251
Corn	106,414
Kafir	65,847
Sweet sorghum	23,749
Milo	18,100
Sudan grass	15,320
Feterita	7,619
Alfalfa	10,841
Millet	3,715
Barley	3,000
Clover	326
Oats	1,300
Flax	22
Miscellaneous grasses	144

On account of abnormal seasonal conditions in 1917, particularly early killing frosts, much of the corn and sorghums were damaged before maturity, so that their value for planting the spring of 1918 was doubtful. Preliminary germination tests showed that it would be unsafe to plant these seeds without first determining their vitality. Consequently a campaign was organized through the public schools of the state, in coöperation with the Division of College Extension, to locate all supplies of surplus seed available for planting the spring of 1918, and to secure germination reports, not only on the seed held for sale, but also upon that which the farmers themselves expected to plant. A total of 16,836 samples of seed were received at the Experiment Station for germination tests. These samples included corn, kafir, sorgo, alfalfa, wheat, milo, and practically all the other common farm crops produced in Kansas. Samples of corn were received from 97 counties, of kafir from 88 counties, of sorgo from 89 counties, and of milo from 74 counties. In fact, practically every county in the state was represented in this seed-testing work. In addition to the germination tests made on all the samples, several hundred samples were analyzed for purity. This seed-testing work will be far-reaching in its educational effect among the farmers and will do much to improve the agricultural situation as it relates to seed supplies.

HORTICULTURE AND FORESTRY.

During the biennium much assistance has been rendered to the horticultural and forest interests of the state. The commercial potato growers have been assisted through experiments and demonstrations relating to disease control, varietal tests, and fertilizer experiments. The varietal tests have included most of the standard varieties grown locally, and in some cases comparisons have been made with seed obtained from Colorado and Red river district of the North. Generally speaking, better results have been secured with northern seed and Kaw valley seed than with seed imported from Colorado. Preliminary plans have been made looking towards community coöperation by Kaw valley potato growers in connection with securing a satisfactory seed supply each year. The experiments conducted with commercial fertilizers have emphasized the fact that potash is more effective than other commercial fertilizers in increasing potato yields in eastern Kansas. In the experiments with dry sprays and liquid sprays the former have proved to be more easily applied and less expensive, and at the same time more effective, in controlling the Colorado potato beetle. Liquid sprays, however, have been found more effective in controlling early blight.

Shortly after this country entered the war the federal government sent out an appeal for a large supply of walnut lumber for use in the manufacture of certain needed articles in connection with the war program. Following this appeal a great deal of attention was paid by the College to the investigation of the walnut lumber situation in Kansas and to assisting the growers of this lumber in marketing it advantageously. Attention was given to the matter of adjusting prices for various sizes and qualities of walnut logs and a campaign was carried on for the stimulation of increased planting of walnut trees in suitable locations. The work of the College in connection with the walnut situation has been helpful both to the growers and to the government. It is estimated that not less than 10,000 cars of walnut logs have been cut for shipment from Kansas since April 1, 1917.

A large amount of work was performed during the biennium in investigating methods of developing profitable orchards in Kansas, both through growing young trees and by renovating old orchards. Special attention has been paid to soil-management features. In this work it has been found that a more vigorous wood production results from thorough cultivation than from growing trees in sod or in alfalfa fields. Where the alfalfa is allowed to grow within three and one-half feet of the trees it has been found that the presence of this crop may encourage the work of the buffalo tree hopper. In the pruning investigations, studies have been made of the effects of summer pruning, winter pruning, and absence of pruning, and important information has been secured as to the relation between these different methods and the production of fruit buds.

MILLING INVESTIGATIONS.

The experimental mill has continued in use for both instructional and investigative work. Investigations have been made of the best methods of milling kafir. It has been found that kafir meal is a more desirable product than kafir flour. This meal was manufactured and put on the local market in a limited way. Certain changes were made in the wheat mill which made it possible to produce a special quality of fine corn meal that could be substituted for the higher-priced corn flour.

Since January 1, 1918, the department of milling industry has had charge of the educational campaign being carried on in the southwestern district by the United States Bureau of Chemistry to prevent dust explosions and fires in mills, elevators and other cereal-grinding plants. This district comprises the states of Missouri, Kansas, Nebraska, Colorado, Oklahoma, Arkansas, northern Texas, and southern Illinois. Meetings have been held in practically all towns in this district having a mill of 200 barrels or more daily capacity, and illustrated lectures have been given, together with miniature dust-explosion demonstrations before mill employees. The object of this campaign is to prevent dust explosions and fires and the consequent destruction of manufacturing plants and food commodities. The work has been practically completed in Kansas, Missouri and Colorado, and thousands of mill employees have been effectively reached.

DISEASES AND PESTS AFFECTING CROP PLANTS.

The Experiment Station during the past biennium has made substantial progress in its investigative work in plant diseases and the various insect pests affecting agricultural plants in the state. Certain marked differences in resistance to stem rust in field and greenhouse tests have been found in three varieties of hard winter wheat developed by the Experiment Station. One of these varieties, Kanred, showed an average rust percentage in the nursery of 10 percent, while certain other wheat varieties in the same field showed as high as 85 percent rust. The distribution and percentage of bunt, or stinking smut, in wheat in the crop of 1917 was given more than usual attention in connection with a systematic inspection of wheat fields made by the State Council of Defense. The names of the owners of inspected fields which were found to contain a high percentage of bunt infection were secured and special literature urging seed treatment was sent to these farmers. Investigations with corn smut have been systematically prosecuted and much new information has been secured regarding this disease. The same is true with reference to sorghum smut. A new method of treating oats for smut has been devised and brought before the Kansas farmers through the Division of Extension. This method, known as the dry formaldehyde method, is inexpensive and more easily applied than any older seed-treating methods. It is estimated that if all the seed oats planted in Kansas were treated by this method an annual saving of approximately $1,500,000 would be made to Kansas farmers.

CROP MATERIALS SUPPLIED TO HIGH SCHOOLS.

The agronomy department of the station during the second year of the biennium prepared several sets of materials to assist teachers of high-school agriculture in their work. Five different sets of these class materials were prepared. The description of each set, together with the number of sets distributed, is as follows:

No. of set.	Description.	Number of sets sent out.
1.	Standard type samples of seeds	32
2.	Head samples of grains	30
3.	Bottle samples of threshed grains	27
4.	Bottle samples of seeds of forage crops	25
5.	Head samples of sorghums	5
	Total number of sets distributed	119

Additional sets are now being prepared for distribution including head and culm samples of grasses and samples of soil types. The demand for this material is rapidly increasing. The charge made to the schools of the state is nominal, being only sufficient to cover cost of growing, collecting and preparing the material for shipment. The work should be enlarged and the institution thus be made to render a larger service to the schools of the state.

Life-history studies have been made of several insects, particularly the Hessian fly and chinch-bug egg parasites under controlled temperature and moisture conditions. These studies have been correlated with others made under natural conditions. Further investigations have been made of the influence of temperature and moisture on the life history of the Hessian fly. It has been found that wind is an important factor in the distribution of the Hessian fly. Investigations of the effect of seed-bed preparation on the emergence of the adult fly indicate that the earlier the ground is worked the fewer are the flies that emerge.

While the work of eradicating prairie dogs, gophers and moles, all of which do extensive damage to Kansas crops, has been carried on by the Experiment Station for many years, a special war effort has been made during the past biennium and the work has been extended to include the destruction of rats and mice. During the biennium 2,883 quarts of prairie-dog poison and 691 pints of gopher poison were sent out with directions for using. During the second year of the biennium 1,506 letters were dispatched to Kansas farmers regarding the destruction of these crop pests. The result of the work of the Experiment Station with reference to these pests is made available to Kansas farmers chiefly through the Division of Extension.

FERTILIZER INSPECTION.

The Experiment Station is charged with the inspection of commercial fertilizers offered for sale in Kansas. One extended inspection trip is made in the spring and one in the fall. The plan is to get each time at least one sample of all the brands of fertilizers sold in the state. The following table shows the number of towns visited and the number of samples taken and analyzed, as well as the number of brands represented, during the biennium:

Time of inspection.	Number of towns visited.	Number of samples taken.	Number of brands represented.
Fall, 1916	27	57	26
Spring, 1917	21	35	20
Fall, 1917	26	46	17
Spring, 1918	22	22	19

All samples taken are analyzed, and the results are published periodically for the information of Kansas farmers. Something of the importance of this work to Kansas agriculture is indicated in the table below, which shows the amounts of fertilizers sold in Kansas during the last 10 years, as indicated by the number of tax tags sold:

Year.	Tons.	Year.	Tons.
1908	2,386	1913	7,380
1909	2,190	1914	9,460
1910	2,420	1915	7,600
1911	3,000	1916	7,640
1912	3,900	1917	12,900

ANIMAL INDUSTRIES.

The work of the Experiment Station relating to animal industries involves beef, dairy, sheep, horse, swine and poultry industries, all of which are important in Kansas agriculture. The activities of the Experiment Station during the biennium in this connection were diverse and extensive. They involved breeding and herd improvement, feeding and management, disease control, and a number of other lines. A few of the more important accomplishments are indicated below.

BREEDING AND HERD IMPROVEMENT.

One of the most important investigations in progress at the Experiment Station is that relating to sex type and functional development and performance in beef cattle. This experiment, which is now in its fourth year, involves the use of twenty Shorthorn cows. Their records are carefully studied for the purpose of securing information regarding the relationship of type to functional development and performance. Accurate records are kept of milk production, calf production and growth measurements, so that a body of extremely useful fundamental information regarding this important problem is being accumulated. The results of this experiment, as they are secured, will be of increasing interest and practical benefit to beef producers in Kansas and adjacent states.

The College dairy herd, which has been in the process of improvement for a number of years, now nummers 170 head, with 80 cows in milk. Of these 80 cows, 54 that have finished yearly records average 410 pounds of butter fat per cow. This herd is now one of the best college dairy herds in the United States, and it contains record cows for each of the dairy breeds in Kansas. The herd is used for feeding investigations, student instruction, breeding work, and incidentally for furnishing, from its surplus, high-class dairy stock for a limited number of Kansas farmers who wish to buy this stock for use in their herds. Another important line of work which the station carried on during the biennium is the conduct of cow-testing associations, of which three have been in operation in Dickinson, Sedgwick and Montgomery counties. The work of these associations and similar organizations is of extreme importance in the improvement of the quality of dairy stock in the state and in the development of more efficient dairying methods.

With the gradual reduction in the range lands available for sheep grazing in the western United States there is a growing interest in the production of sheep on the farm, both in Kansas and elsewhere throughout the country. The demand for wool and mutton is rapidly increasing, while the possibilities of producing these commodities by the old methods, which required extensive open range, are constantly becoming more restricted. In view of these facts, the Experiment Station during the past biennium has devoted much attention to the problems of farm sheep production. This work has involved the keeping of a number of representative types and breeds of sheep and the publication of material of interest to farm sheep producers. In the latter connection a member of the Experiment Station staff prepared a booklet discussing the importance and methods of management of sheep on farms in this section of the country, and more than 500,000 copies have been distributed throughout the Southwest.

FEEDING AND MANAGEMENT.

The recent marked advances in the prices of stock feeds have emphasized as never before the importance of increased efficiency in animal feeding. In order to realize the highest possible efficiency in stock-feeding enterprises it is necessary that we have more knowledge than is now available regarding the fundamental problems of animal nutrition. During the past biennium the Experiment Station has paid a great deal of attention to this important work. The records of six years of experiment in the study designed to determine the uses of food in the animal body have been prepared in a form suitable for technical publication. The information obtained in these experiments has great scientific value, but its pratical applications have not yet been thoroughly demonstrated. For this reason additional experiments have been conducted on different phases of the subject. They have included the study of the effect of feeding ash and protein to fattening hogs under practical conditions; a study of the deficiencies of corn for feeding pregnant sows, and an investigation of the protein and ash deficiencies of corn and sorghum grains. These experiments have contributed much practical information with reference to the proper utilization of feeds in livestock production, and the results will have decided practical value in assisting Kansas farmers in securing a higher utilization of their food materials.

In view of the growing interest in the production of baby beef, the Experiment Station has conducted a series of investigations during the past biennium, the results of which furnish much reliable data relative to practical methods of baby-beef feeding. In these experiments various combinations of Kansas-grown feeds and certain imported feeds have been fed to several lots of animals, and the results illustrate a number of possible improvements over the methods of baby-beef production common in Kansas.

The shortage and high price of feeds commonly fed to dairy cattle is bringing about a change in the methods of feeding for milk production. The Experiment Station has investigated a number of new combinations of feeds for the purpose of assisting in increasing the efficiency of Kansas-grown feed commodities. Special attention has been paid in this connection to the use of silage made from kafir heads and butts and from kafir butts alone, and also of silage made from corn, both with and without grain. An experiment is also in progress for the purpose of investigating four different methods of feeding dairy heifers. This experiment involves twenty-four heifers, which are divided into four lots at the age of six months, and thereafter fed different rations until each cow has produced at least three calves. Careful records are kept of monthly measurements of growth in these heifers and of their production of calves and milk. This experiment is producing much information regarding the relative values of the different rations, their effects on the growing cattle, and the relative costs of growth and milk production.

The extensive experimental feeding work which has been conducted during the past biennium with cattle, hogs and sheep has demonstrated the possibility of finishing these livestock for market at a profit in spite of the exceedingly high prices of feeds. Furthermore, the results of this investigational work have been of particular value in showing the profits which can be obtained through the utilization of various rough feeds grown on Kansas farms, many of which feeds commonly have no commercial value.

CONTROL OF ANIMAL DISEASES.

During the biennium the principal work of the Experiment Station in connection with the control of diseases of farm animals was concerned with blackleg and contagious abortion of cattle, hog cholera, and the common poultry diseases.

Much progress was made in developing and extending the use of germ-free blackleg vaccine. During the years 1916 to 1918 no fewer than 55,000 doses of this material were distributed throughout the state by the Experiment Station. Considerable testing work has been done upon the blackleg filtrate during the past year. These tests indicate that the blackleg filtrate has as good immunizing properties as the germ-free blackleg vaccine. On this account the Experiment Station has arranged to offer the filtrate for sale, and it is believed that the filtrate, being somewhat cheaper to make, may replace the germ-free vaccine.

Contagious abortion of cattle is a serious economic problem confronting the livestock men of the state, as hundreds of thousands of dollars are lost each year from this disease. There is need for much additional information regarding the disease, but the Experiment Station has been unable to carry on extensive investigative work with it because of lack of funds. However, the most up-to-date information available regarding the disease and methods of controlling it has been prepared for publication as a station circular, which will be distributed throughout the state.

During the biennium a large amount of work has been done in the control of hog cholera. The Experiment Station has been active in distributing anti-hog cholera serum, and in order to facilitate the distribution has established distributing stations in various parts of the state. In practically all cases where the government is coöperating to eradicate hog cholera the serum has been furnished by the College serum plant. Something of the extent of the work in hog-cholera control during the past biennium is indicated by the following figures: The College serum plant produced 5,054,765 cc. of serum and 78,670 cc. of virus. There were distributed throughout the state 3,318,765 cc. of serum and 78,670 cc. of virus. Toward the close of the biennium, regular serum-distributing stations were established in thirty-two towns throughout the state. These stations store and dispense the serum at a cost of about 0.125 cent per cc. The arrangement is working very satisfactorily.

In connection with poultry diseases a number of fundamental investigations have been carried on in order to secure needed information as to methods whereby certain of these diseases are transmitted. It has been demonstrated that fowls may become infected with the nematode *herterakis papillosa* Bloch by the feeding of the dung earthworm. Studies of the life history of this parasite have been begun. Special work has been done in connection with roup in fowls. In this work it has been proved that the cause of the disease is due to an organism of the "Pasteurella" group, and also that the organism is practically the same as that causing fowl cholera. The results secured indicate that fowls immune to roup are also immune to fowl cholera. Work is under way at present to develop a bacterin method of treating this disease. An effort is being made to develop a single inoculation method of treatment.

STALLION REGISTRY.

In order to inform the farmers of the state as to the breeding of the stallions used, the Experiment Station is charged by law with maintaining a stallion registry in which all stallions in service in Kansas must be registered and licensed. During the biennium the number of licenses issued totalled 10,484, distributed as follows:

	1916-'17.	1917-'18.
Stallion licenses issued	5,440	5,044
Pure-bred stallions	3,363	3,260
Grade and scrub stallions	2,077	1,784

Under the registry law the number of grade and scrub stallions is decreasing. The pure-breds registered for service in 1918 represent a larger proportion of the total number licensed than they did in 1917. More grade and scrub stallions have been retired from public service in 1918 than ever before in recent years. In spite of the fact that fewer of the stallions were licensed to stand for public service in 1917 than for 1918, the number of Percherons has increased, this breed now representing 71 percent of all the pure-bred stallions in public service in Kansas. Each year sees a decline in the number of standard-bred stallions standing for public service, the number during the past year decreasing from 286 to 194. Fewer cases of deception and attempted fraud on the part of stallion dealers have been reported this year than ever before, and during the first six months of 1918 it was not necessary to prosecute any one for violation of the stallion license law.

STATE DAIRY COMMISSIONER.

The state dairy commissioner has continued his work in the inspection of dairy manufacturing plants and the examination and licensing of milk and cream testers. The following table contains a statement of the character and extent of some of the more important activities of the dairy commissioner during the biennium:

	1916-'17.	1917-'18.
Towns visited	932	575
Cream stations inspected	1,267	804
Creameries inspected	131	110
Ice-cream stations inspected	65	78
Dairy farms inspected	93	44
Condensaries inspected	3	8
Receiving stations inspected	17	8
Dairy establishments closed because of unsanitary conditions	69	34
Ice-cream sales rooms inspected	....	80
Test scales condemned	....	10
People examined for cream buyer's permits	2,209	1,888
Percent of applicants receiving permits	90	88

The policy of the state dairy commissioner is to stimulate dairy production as well as to improve the quality of dairy products by promulgating reasonable rules and regulations from time to time. The requirement of immediate washing of dairy utensils and their return to the dairyman in a clean condition has saved thousands of dollars to dairy farmers of the state. The local demand for dairy products increased materially, notwithstanding high prices. Tested herds are proving to be a decidedly valuable investment for their owners. There has been less tendency on the part of Kansas dairymen to dispose of their dairy herds than has been observed in certain eastern states.

DAIRYING IN THE STATE INSTITUTIONS.

In accordance with an act passed by the 1917 legislature, the department of dairy husbandry has general supervision of the dairy herds at the various state institutions. These institutions include the Topeka, Osawatomie and Larned state hospitals, the State Hospital for Epileptics, the Winfield State Home, the State Orphans' Home, the State Tubercular Sanatorium, State Penitentiary, Soldiers' Home, Boys' Industrial School, State Reformatory, and the Girls' Industrial School. Regular visits are made to these institutions by a representative of the department of dairy husbandry. Expert assistance is given in selecting animals for these herds, in keeping production records, and in methods of feeding and management. It is hoped that through this relationship between the College and the other state institutions much constructive work can be done towards the improvement of the quality of dairy cattle throughout the state.

CONTROL OF COMMERCIAL FEEDING-STUFFS AND LIVESTOCK REMEDIES.

The feed-control office has had charge of the registration and inspection of commercial feeds and livestock remedies. In this work considerable attention was given to shipments of cottonseed products coming into the state, and in a number of cases it was possible to secure rebates for the consumers on account of deficiencies in protein in the cake or meal, or because of short weight. In a few cases seizures of interstate shipments were made under the federal law and prosecution by the federal government was requested. Considerable difficulty has been experienced with manufacturers of poultry feeds who have attempted to sell products consisting very largely of weed seeds and screenings under misleading names or brands. Owing to the urgent demand for wheat flour, the wheat shorts on the market has been of poor quality. As there was a differential in prices for each grade of shorts, the state was called upon to classify a large number of samples of this feed and to see to it that the product was properly labeled. A numerical statement of the work in connection with feedstuffs control is as follows:

	1916-'17.	1917-'18.
Inspections made	1,427	1,346
Firms visited	1,358	1,305
Towns visited	327	222
Feeds registered	1,838	1,855
Firms registering feeding-stuffs	865	768
Inspection samples of feeding-stuffs analyzed	421	186
Feeds not up to guarantee in one or more constituents	155	107

	1916-'17.	1917-'18.
Feeds deficient in protein	31	39
Feeds deficient in fat	59	21
Feeds excessive in fibre	113	47
Federal samples analyzed	72	20
Office and commercial samples analyzed	229	216
Citation issued but prosecution for feed violation held in abeyance	14	7

During the first year of the biennium 32 additional livestock remedies were registered in the state, and 44 additional remedies were registered during the second year. On June 30, 1918, a total of 431 livestock remedies were registered by a total of 168 firms.

The Experiment Station issues publications from time to time to acquaint the trade and general public with the requirements of the law with reference to feeding-stuffs and livestock remedies.

ACTIVE INVESTIGATIVE PROJECTS.

In this report it is impossible to discuss the results of all the investigative work which has been in progress in the Experiment Station during the biennium. A few of the outstanding results already have been mentioned. During the biennial period approximately 100 distinct lines of investigation were in progress. These investigations all relate to problems confronting Kansas farmers. Something of their varied character can be learned from the following partial list:

Plant Industry Investigations:

Alfalfa Breeding.
Relation of Climatic Conditions to Injurious Insects.
Hessian Fly Investigations.
Studies of the Corn-ear Worm.
Soil Fertility.
Small Fruit and Garden Crops.
Potato Investigations.
Changes in Soil Composition Produced by Cropping.
Milling Investigations.
Breeding Corn for Drouth Resistance.
Cereal Diseases.
Forest Tree Investigations.
Injurious Mammals.
Kafir Ant and Cutworm Investigations.
Termite Investigations.
Yellowberry in Wheat.
Wheat Storage and Shrinkage.
Bacteriology of Canning Fruits and Vegetables.

Animal Industry Investigations:

Animal Genetics.
Improvement of Farm Poultry.
Blackleg.
Grazing.
Heifer Development.
Sheep Feeding.
Marketing Poultry and Eggs.
Nutrients in Forage Crops.
Embryology of the Tapeworm.
Marketing Butter.

Cream Grading.
Sweet Clover Pasture.
Factors that Influence the Composition of Body Fat.
Bees.

General Investigations:

Farm Management.
Farm Tenantry.

Substantial progress has been made in all these lines of investigation, and others which have not been named. Most of this work is of a character which requires a series of years for its completion.

PUBLICATIONS ISSUED.

During the biennium ending June 30, 1918, the Kansas Agricultural Experiment Station issued six general bulletins, three technical bulletins, two director's reports, fourteen general circulars, and five inspections circulars, making a total of 890 different pages of printed matter. The general bulletins varied in size from sixteen to seventy-nine pages and gave popular reports of the experimental work conducted by the station for the benefit of the farmers of the state. The circulars averaged twelve pages in length, each presenting important and timely information on some phase of Kansas agriculture. Much of this agricultural literature has been regularly distributed to farmers and others in the state interested in the different publications available, about 20,000 names being on the station's regular mailing list and more than 130,000 copies having been distributed by the station as a result of direct requests. In this way the station is able to make the results of its experimental work available not only to various publicity agents, extension workers and agricultural instructors, but also to a large extent directly to the farmers themselves.

BRANCH AGRICULTURAL EXPERIMENT STATIONS.

The work of the main Agricultural Experiment Station at Manhattan is supplemented by that of the four branch stations, located at Hays, Garden City, Colby, and Tribune. In addition to the supplementary features of the work of these stations, they carry on a large number of investigations of important problems peculiar to the agricultural conditions in the western part of the state. The agriculture of that section is so different from that of the eastern part of the state that special problems peculiar to the western section must be solved. Generally speaking, these problems relate to methods of combating drouth and soil plowing in crop production, and to methods of establishing livestock industries on a profitable basis with plant industries. Substantial progress has been made in these directions during the past biennium.

FORT HAYS BRANCH STATION.

The Fort Hays Branch Experiment Station consists of 3,600 acres of land, divided into an experimental section of 1,689 acres and a commercial farm of 1,911 acres. The crop-production projects in operation include dry-land tillage and rotation experiments, tests of cereal and forage crops, forest nursery and park work, and garden vegetables. In addition to the regular investigative work at the station, coöperative demonstration tests are conducted with farmers through the Division of College Extension. The station owns 1,078 head of livestock, of which 485 head are used in investigative work. There are seventeen experimental lots of beef cattle, sheep and hogs each winter, and fifty-six grade Holstein cows are used in the experimental dairy work. The commercial farm produces annually about 300 acres of alfalfa, 350 acres of grain and forage sorghums, 100 acres of corn, and 600 acres of wheat. Six silos, a grain elevator and a feed barn make it possible for the station to handle the feed and seed situation in a satisfactory manner.

A few of the important accomplishments of the Fort Hays Branch Experiment Station include a demonstration that early plowing produces an average of six bushels per acre more of wheat than does late plowing; the securing of experimental data making possible the development of practical methods of combining summer fallow with other farm practices; and results showing that cattle can be wintered successfully on a daily ration of forty pounds of silage, one pound of cottonseed cake, and straw, more cheaply than on any other feed so far tested. The station has developed Western Orange cane and Pink kafir and has proved their value in the agriculture of western Kansas. Much has been done to introduce Sudan grass in that section. Through an accurate cost accounting system in operation at the station it has been possible to answer the constantly increasing number of inquiries regarding the economic features of farming in western Kansas. One of the successful features of the work of the Fort Hays Branch Station is the holding of an annual round-up, which now has reached an attendance of approximately 2,500. The annual Sorghum Day and Wheat Day have also been very popular. During the past biennium the station scientific staff has devoted much time to emergency crop-production work, seed-campaign service on the local Council of Defense committees, and many other war services.

GARDEN CITY BRANCH STATION.

The work at the Garden City Branch Experiment Station during the past biennium was substantially a continuation of the projects already under way, except for the addition of a dairy herd, which was transferred to Garden City from the Dodge City Branch Station upon the abandonment of the latter in April, 1917. The principal lines of work include dry-land crop-rotation and tillage experiments; variety tests of crops, both with and without irrigation; investigations of the use of water in irrigation as affecting cereal crops, forage crops, and truck crops; and the conduct of experiments with the dairy herd. Substantial progress was made in all these investigations. Particularly striking results were obtained with irrigation, both with reference to its value and cost as compared with dry-land farming, and with reference to various quantities of irrigation water used. In most of the sorghum crops the largest quantities of water applied produced the greatest net profits. Cereal crops, however, did not respond so readily to increased water application as did the sorghums. Alfalfa under field conditions produced 1 ton of hay for each 5.83 acre-inches of water applied. It costs about $4 per acre-foot to pump water on the station, where the lift ranges from 120 to 130 feet. On this basis the cost of water per ton of alfalfa hay was about $2.

COLBY BRANCH STATION.

The work at the Colby Branch Experiment Station includes investigations of crop rotation, tillage methods, conservation of soil moisture, and general farm management. These investigations are of great importance in western Kansas, and they are being carefully studied in an effort to determine what are the best methods to follow for a series of years. Another important feature of the work of this station is that relating to dairy farming, as dairying promises to be one of the industries which will help to stabilize the agriculture of northwestern Kansas. In August, 1915, six high-grade Ayrshire cows and a pure-bred Ayrshire bull were placed at the station, where they are kept in order to get the greatest returns from the feed produced and to demonstrate the advisability of keeping a few dairy cows on western Kansas farms. The original herd of six cows increased to thirteen cows and five heifers, and the income from the dairy herd has increased proportionately. Some of the concentrated feeds used are purchased, but all of the other feeds are produced on the station. Three silos are used, and enough feed is carried over in these each year to last through a year of possible crop failure.

TRIBUNE BRANCH STATION.

The work of the Tribune Branch Experiment Station was conducted on substantially the same lines as during the preceding biennium. This work includes the production of varieties of various crops to test their adaptation to southwestern Kansas conditions. The season of 1916 was in many respects a severe one, but nevertheless fair yields were secured from Dwarf milo, Dwarf kafir and Freed sorgo. Some fields of Dwarf milo yielded 20 bushels to the acre. Sudan grass yielded more than 2½ tons per acre where broadcasted and about 1½ tons per acre where planted in 42-inch rows. Some of the corn varieties produced 20 bushels per acre. Sufficient feed was produced on the station to carry the livestock through the winter, with a considerable surplus for sale. Generally speaking, the results secured at the Tribune station support those obtained at the other branch stations, and these results are useful in developing sound farm practices for southwestern Kansas.

FINANCIAL NEEDS.

If the work of the Division of Agriculture and the Agricultural Experiment Station is to be safeguarded against serious deterioration during the ensuing biennium, larger appropriations than were made for the present biennial period will be necessary. The recent marked increases in the costs of labor and of all materials are too well known to require discussion. These increases very seriously affect the investigative work, and they must be provided for unless many vitally important activities are to be discontinued.

The heads of departments in this division have furnished statements as to the increases in the basic scale of prices for labor and materials. Their statements indicate that the prices have advanced during the past eighteen months, the extent of advance ranging from twenty percent in a few instances to as much as 150 percent in some cases. A conservative estimate place the average increase at 35 percent. The estimates for appropriations to finance the regular work of the division and station during the next biennium should, therefore, be 35 percent greater than the appropriation made two years ago. On this basis, merely to maintain the regular investigations, the station appropriation should be increased from $40,000 to $53,000 per annum.

In addition to this proposed flat increase in the appropriation, the following increases for certain extraordinary expenditures and for the branch stations are recommended for the next biennium:

For resuming the soil survey of the state and continuing it during the next biennium	$10,000
For repairs and additions to the equipment of the department of bacteriology	1,600
For maintaining and extending the coöperative experiments	5,000
For a hog plant ($10,000), a Hereford bull ($2,000), a Percheron stallion ($2,500), and for additions, improvements and repairs in the equipment for the work in the department of animal husbandry ($15,500)	30,000
For maintenance of the Garden City Branch Station (an increase of $1,000 per year), and for a new irrigation pumping plant at Garden City ($2,500)	4,500
For maintenance of the Tribune Branch Station (an increase of $500 per year)	1,000
Total	$52,100

It should be noted that these estimates are for increases over and above the current appropriations, and that they are estimated as additions to the flat increase of 35 percent recommended.

Since this country entered the war, and particularly during the present year, increased costs have made it necessary to reduce both the quantity and quality of much of the investigative work done on the different projects. In many instances it has been possible to keep the work going only by putting off much-needed repairs and by delaying the performance of certain other work which was not immediately necessary. If we are obliged to persist in these practices during the next biennium the quantity of work in progress will have to be seriously reduced, and, what is perhaps more important, the quality of work done will certainly deteriorate. No increases are asked for to cover new work which will need to be begun as soon as possible after the war, such as increased grazing investigation and investigations of animal abortion. The increases requested are urgently needed and every possible effort should be made to secure them.

ENGINEERING.

TEACHING AND OTHER WORK.

The enrollment of the Division of Engineering during the College year 1917-1918 was 395, as compared with 537 during 1916-1917, a decrease of about 26 percent. The faculty for the year 1917-1918 was 27, as compared with 34 in 1916-1917, a decrease of about 21 percent. The amount of teaching has been little affected by the decreased enrollment. With a faculty less than four-fifths as large as previously, the Division of Engineering carried the entire curriculum; gave elective courses in rural engineering and domestic engineering to students from other divisions of the College; published bulletins dealing with the utilization of electricity and with the conservation of fuel; tested road materials for the State Highway Commission; acted in a consulting capacity in connection with the various engineering problems as they arose in the state in general and in the national army cantonment at Camp Funston in particular; manufactured practice grenades and inclinometers for the United States army; made difficult repairs upon engines and machinery sent to the College from Camp Funston; gave intensive courses to about 800 men of the motorized regiment from Camp Funston, and trained several hundred other soldiers under the direction of the War Department committee on education and special training.

As in former years, the Division of Engineering gave free instruction to the operating engineers of Kansas. This instruction has been carried on in coöperation with the National Association of Stationary Engineers.

Members of the faculty of this division aided in the fuel conservation campaign during 1917-1918 and coöperated with the National Safety Council and with the War Department committee on education and special training.

The Division of Engineering supervised all improvements and repairs to College buildings and equipment, had charge of the power plant and heating plant, supervised the care of buildings, had charge of the hauling of freight, and attended to the other details in connection with the upkeep of the physical plant of the institution.

The last state legislature created the Kansas Highway Commission and named the engineering laboratories of the Kansas State Agricultural College as the testing laboratories of the commission. No appropriation was made for additional men or for equipment, and the expenses of testing road materials for the state came out of the funds appropriated for the Division of Engineering. No charge was made by the College for the testing of road materials, and the teachers of the Division of Engineering, besides their teaching, war work and regular research activities, carried on the necessary testing for the commission. Every bit of material for the federal-aid roads is being tested in the engineering laboratories of the College. When we consider that Kansas is spending during the present year eleven million dollars on roads, the great task which falls upon the engineering teachers of the College is evident.

During the College year 1917-1918 the Engineering Division of the

College, in conjunction with the State Highway Commission, held a road school for county highway engineers. More than fifty county engineers were benefited by this school.

One member of the faculty of the Division of Engineering, as chairman of the committee on student health, coöperated with the medical and sanitary officers at Camp Funston in controlling contagious diseases, with particular reference to spinal meningitis, typhoid and smallpox.

As in former years, this division took an active part in the conduct of Farm and Home Week, aided the special tractor schools all over the state, conducted eight-week short courses in traction engines and shop work, gave instruction in farm motors, including trucks and traction engines, in rural architecture, shop work, and other subjects related to rural engineering.

During the College year 1916-1917, 1,838 students received instruction in the Division of Engineering. This number was greatly increased during 1917-1918 on account of the intensive courses offered to soldiers from Camp Funston and from the national army, under direction of the War Department committee on education and special training.

THE ENGINEERING EXPERIMENT STATION.

The Engineering Experiment Station of the Kansas State Agricultural College conducts original research tests and experiments, furnishes information and compiles data in engineering and in the other branches of the mechanic arts, with particular regard to the problems which bear directly on the conditions and needs of the United States during the present emergency, and especially such as are of direct importance to Kansas.

During the biennium the following bulletins, based on investigation, were completed and published:

Bulletin No. 4. The Water Supply of the Farmhouse, by J. D. Walters.
5. Sewage Disposal for Country Homes, by F. F. Frazier.
6. Inexpensive Plumbing for Farm Kitchens, by W. A. Etherton.
7. The Farmhouse Improved, by W. A. Etherton.
8. Economical Use of Fuel in the Home, by A. A. Potter and S. L. Simmering.
9. Electric Cooking Appliances, by R. G. Kloeffler.

Besides the investigations dealt with in the foregoing bulletins, several others were well under way, but were interrupted by the war. Tests on paints, tests on substitutes for gasoline and several other investigations of particular value to the country in the present emergency are being continued.

THE DIVISION AND THE WAR.

The faculty of the Division of Engineering took an active and leading part in all matters aiding the country in the present emergency.

Very early in the war members of the division played a prominent rôle in the industrial census of the United States, one of the engineering faculty having been appointed by the Secretary of the Navy as associate member of the Naval Consulting Board and as director of industrial preparedness for Kansas.

Members of the electrical engineering faculty, in coöperation with the department of physics, gave war courses in radio, electricity and telephony all through the year 1917-1918. These classes were formed of students of draft age expecting to be called to the service.

From May 15, 1918, to July 15, 1918, 250 men from the national army were trained as auto mechanics, as electricians, as radio operators, and in other lines related to the mechanic arts. This number was increased to 500 beginning July 15, 1918. Men from the national army in groups of over 500 have been and are now being trained along engineering lines in the engineering laboratories of the College. These intensive courses will be continued through the summer, as well as through the winter, as long as the war lasts, and most probably also during the reconstruction period. The College has now a contract with the War Department to train 2,250 men before May 15, 1919.

NEEDS OF THE DIVISION.

The most urgent needs of the Division of Engineering are the following:

1. An addition to the engineering building to house the equipment of the division properly and to provide instructional quarters, so that the work can be properly carried on.

The Division of Engineering has a contract with the War Department to give intensive courses to 500 soldiers continuously, besides the several hundred engineering students enrolled in the various professional engineering courses of the College. The work of the division in training soldiers as technicians, mechanicians and engineers for the United States army has been most successful, but on account of lack of room the program cannot be extended. Inspectors of the War Department particularly objected to the quarters used for the training of electricians. Requests came repeatedly for the College to train telephone electricians for the army, but the crowded quarters of the department of electrical engineering made this training impossible.

On account of the lack of room several courses in agricultural engineering also had to be discontinued.

The increased use of power farming machinery is bringing about a demand for men trained in the handling, care and repair of farm machinery and farm engines. The present buildings of the division limit the amount of training in rural engineering.

The College has a well-trained and experienced faculty and good engineering equipment. A suitable addition to the present engineering building will greatly increase the effectiveness of the College in the present emergency, and will place this institution in a better position to serve the people of Kansas during the reconstruction period after the war. An appropriation of $75,000 will enable the state to erect a suitable addition for the foregoing purposes.

2. Our staff is now depleted, mainly on account of the war, but also on account of the more attractive compensation offered outside of Kansas. At least 25 percent additional appropriation should be available for salaries for each year of the next biennium.

3. An appropriation should be made for experimental work in such engineering lines as are of particular value to Kansas. An appropriation of $10,000 a year will enable the division to carry on many investigations of value to the state and the nation.

4. An appropriation of $10,000 a year should be made for the testing of road materials found in Kansas. The last legislature created the Kansas Highway Commission and named the engineering laboratories of the Kansas State Agricultural College as the testing laboratories of the commission, but made no appropriation. During the biennium this work has been carried on by the teachers of the division, and with funds which should have been used for instructional purposes. The effectiveness of the work will be greatly increased if a definite appropriation is made by the legislature for testing the road materials of Kansas.

5. Fifteen thousand dollars should be appropriated for improved machine tools in the College shops. Much of the present equipment is out of date and poorly suited for instructional purposes.

6. Thirty thousand dollars should be appropriated for coal storage and for coal-handling machinery in connection with the College power and heating plants. The College is using too much man power. Proper coal-handling machinery will return an interest of about 17 percent on the investment. Coal storage is also a serious problem on account of spontaneous combustion. Concrete storage bins will eliminate this danger and will enable the College to purchase its coal supply during the most favorable season of the year.

7. Twelve thousand dollars is needed for additional water storage. The present storage capacity is inadequate and offers insufficient protection against fire.

8. The appropriation for coal should be increased to $50,000 a year. The increased cost of coal and the necessity for supplying heat and light to barracks will greatly increase the cost of upkeep of the College power plant.

9. Necessary extensions and repairs to water mains, steam mains and electric wiring will require $25,000.

10. The appropriations for buildings, improvements and repairs should be increased from $25,000 to $45,000. With the present cost of labor and materials a smaller appropriation will mean poor upkeep and rapid deterioration of buildings.

GENERAL SCIENCE.

The outstanding features of changes in the Division of General Science during the biennial period 1916-'18 have been those growing out of conditions caused by the European war and by the entrance of this country into it. There has been a significant, though not in the aggregate a very great, loss in the personnel of the teaching force because of men entering the armed forces of the United States. The departments of physics, chemistry and bacteriology have been most affected in their personnel on this account. Nearly all of the departments have been affected in respect to their work, either directly or indirectly. Members of departments to which the war has not brought direct duties or responsibilities have taken up the burdens of assisting in work at Camp Funston, Fort Riley and the Manhattan Community House; in Young Men's Christian Association, Knights of Columbus, Young Women's Christian Association and Red Cross work; in liberty loan and thrift stamp campaigns, with Boy Scouts, in public addresses, and in other lines of activity directly supporting the war work of the country. The war work handled directly by College departments and officers of the College has necessitated a readjustment of their duties, which has indirectly caused an increase in the burden upon those who are not actually engaged in war work.

While the duties of members of the faculty have thus become heavier and more diverse outside the classroom and the laboratory, the work of teaching and research has been affected to a material extent by the existence of war. The attitude of students is noticeably different. They are interpreting College activities in terms of their relation to winning the war or contributing to the agencies which ameliorate such hardships. They are more serious of mind and more earnest in their consideration of the relation of their present work to immediate service in connection with the war. The excitement of war news and all movements in connection with war activities makes it difficult to maintain habits of regular and serious study unless the results can be seen to be of immediate importance. Teachers in the presentation of their several subjects are making such modifications as are possible or practicable to serve the needs of students in connection with the war.

The effect of the war upon departments which use much material has become more pronounced with the continued and great increase in prices. Department allowances which were ample four years ago are now altogether inadequate. Not only does this apply to the purchase of commodities, but to the cost of such labor as must be employed by the hour or the month. Wages prevailing in the commercial and industrial world are such that it has been necessary to make corresponding increases in those paid students and laborers employed by the College departments.

In the employment of members of the faculty and the other more permanent employees of the departments it is becoming increasingly more difficult, not only to find properly qualified teachers, but to obtain them at the salaries which our budget will permit. In some departments, considering the quality and experience of the men employed, it has been necessary to increase salaries 40 or 50 percent beyond the range of those prevailing four years ago. Even in the departments handling work not directly affected by the demands of the War Department for specialists there has been great difficulty in obtaining competent teachers and investigators because of the general increase in the demand for capable men and women. The salaries of stenographers and clerks range much higher than in the past, probably not less than 25 percent. One effect of the man-power demands of the government has been to markedly increase the number of women employed as teachers. It has become almost useless to attempt to obtain men as teachers for positions which women can fill.

The diminution in the total number of students in the institution has made it possible to reduce to more suitable sizes many classes which for some time have been entirely too large for effective teaching. This, together with the added duties incident to the war which have come to many members of the division, and the unavoidable losses in personnel, has prevented the appearance of any problem concerning superfluous teachers. There have been none. A few readjustments have been made, but voluntary resignations have more than kept pace with any falling off of requirements for teachers. In several lines of research work men have been lost, and it being impossible to replace them, the work has been discontinued.

The decrease in student attendance has diminished to a certain extent the pressure upon the recitation rooms and laboratories of the College. There is still, however, the imperative need of adequate housing for the department of physics, which has been felt for a number of years, and which is shared to a considerable extent by the departments of electrical engineering and chemistry, now housed with department of physics in Denison Hall. It is a matter of great regret that the appropriation made by the last legislature in an attempt to provide for the department of physics has, with the very great advance in the cost of building, been found to be entirely inadequate. An expenditure of $80,000 in buildings that will provide directly or indirectly for the three departments named is an immediate necessity.

The work of other departments would be much facilitated if it could be consolidated more closely in space. The department of English, for example, handles classes in three different buildings. This scattering of offices and classrooms makes effective supervision and coöperation very difficult. The departments of zoölogy and entomology, though housed in one building, are considerably hampered by reason of lack of room. Much could be done to remedy this condition by utilizing space in the attic of Fairchild Hall if funds were available for the purpose. The appropriation for improvements and repairs of buildings and grounds should be two or three times that which it is at present. The halls, rooms and offices of many of the buildings are highly discreditable to the state because of the lack of means to renovate them, and with sufficient funds some attic and basement space might be utilized to a greater extent than it is now.

The Division of General Science includes eighteen departments, to some of which work is attached which might more logically be organized in separate departments. More than half of the entire teaching of the institution is done by members of this division. Its departments give fundamental training in English, mathematics, physical sciences, and biological sciences, which is required for technical training in the several curricula. It also gives education in general cultural subjects, which prepare for intelligent citizenship and for general satisfaction in life.

Most of the departments give advanced work beyond that required by the regular requirements of the technical curricula, thus making it possible for students to take the curriculum in general science and to major in a specific subject. Through further utilization of these facilities students may take graduate work, the quality of which is such that it has been recognized by such institutions as the Ohio State University, the University of Wisconsin, the University of Chicago, and others, and credit allowed toward the doctor's degree in those institutions. The identification of a number of the science departments with the organized research work of the Agricultural and Engineering Experiment Stations gives excellent facilities to students for doing graduate work under the most favorable circumstances. The departments also conduct research work independently of these experiment stations.

The following paragraphs are submitted with reference to individual departments, or groups of departments, engaged in work more or less closely allied:

The English language is, as a matter of course, our fundamental vehicle for the expression of thought. Three departments are especially occupied by this field, namely: those of English, industrial journalism and printing, and public speaking. The required work in English is so organized as to be of the greatest practical value to students in all curricula, the aim being to enable the student to acquire facility in writing accurately, clearly and concisely. Much time has been given to the organization of the successive courses offered by the department so that there will be progressive development. Spoken English is scarcely less important than written English, in some cases even more important. The department of public speaking aims to make effective, convincing speakers rather than orators. Effectiveness depends much upon attractiveness, however, and this feature of public speaking is therefore not overlooked. The department assists literary societies, the Dramatic Club and competitors in the oratorical contest in the preparation and presentation of work for public performance.

Much interest is taken in debate. This is especially fostered by the literary societies, assisted by the departments of English and public speaking. Several series of intercollegiate debates have been conducted with results of much benefit to the participants and highly creditable to their instructors. Classes in oral English have also met a large demand.

There is a large and definite field for writers in the preparation of material for agricultural papers and for journals devoted to other lines of industry. The importance of this and its appeal to the students of this institution is such that this specialized branch of English is organized as a department of industrial journalism and printing, and a four-year curriculum has been worked out especially to meet the needs of students wishing to go into this line of work. Students in other curricula also have the privilege of taking one or more terms of work in journalism, and the extent to which this department is patronized by students is increasing steadily and markedly. This department is also responsible for the general publicity of the College, and it is gratifying to note that the decrease in space devoted to press material from this College since the war began is only 3 percent, which is in striking contrast to some publicity agencies, which report a loss of as much as 50 percent. The department endeavors to devote its publicity material to matters of importance to the nation in this critical time. For some months the publicity for the United States Food Administration in Kansas was handled by this office, and the head of the department is director of publicity for the Kansas Council of Defense, and handles, for Kansas, material sent out by the Council of National Defense. *The Kansas Industrialist* is published under the general direction of this department, and three bulletins on agricultural journalism, the first published by any college, were issued within the biennium. The printing section of the department has continued to serve most usefully the purpose which it has met for over forty years in the institution. Without its presence for emergency and special printing the College would be much handicapped.

In the department of modern languages the influence of the war has been strongly manifested by a heavy reduction in the registration for German and a corresponding increase in the demand for French and Spanish. Not only from the cultural side, but especially in science and technology, training in foreign languages has come to be an essential in modern education.

Concerning the department of mathematics it may be noted than on account of diminution in the number of students in attendance the second year of the biennium there has been a considerable reduction in the work of instruction required in mathematics and also in the number of instructors employed. Mathematics will always have an essential place in any curriculum in which accuracy is essential, or in which quantitative data concerning complex matters are to be handled, and the necessity for mathematical interpretation of results in the sciences is being more and more recognized.

The department of chemistry is one of those which have been most seriously affected in its personnel by the war. On account of the extremely great demand for chemists, both in the chemical warfare service of the War Department and in the industries of the country, the department has lost a large number of men, and at this date it is almost impossible to obtain competent men to fill positions. Within the fiscal year 1917-'18 thirteen men have resigned from the department. The difficulty of obtaining men is such that several women have been employed in filling some of the positions. It has been necessary to pay much higher salaries for men of even less qualifications than those hitherto employed. The scarcity of competent men for chemical positions will undoubtedly continue for several years, and salaries from 35 to 50 percent higher than heretofore paid will be necessary. The department has had no specific war duties, excepting that for which Professor Swanson is employed, but has been called upon several times for advice and analytical work in connection with problems arising at Fort Riley and Camp Funston. The official work required of the department during the biennial period has continued to be the analysis of food samples submitted by inspectors for the State Board of Health; the analysis of samples of dairy products submitted by the state dairy commissioner; the analysis of stock remedies and proprietary medicines submitted by inspectors; analysis of samples of commercial feeding-stuffs under the provisions of the feeding-stuffs law; and the inspection of commercial fertilizers on sale in the state, and analysis of samples taken.

The research work conducted by the department of chemistry during the two years covered by this report has for the most part been in connection with the Agricultural Experiment Station and included nine important projects. In addition to work in connection with the Agricultural Experiment Station, research upon paints has been conducted. Observations have been made upon a large number of panels covered by paint made according to different formulas. This experiment shows that there are marked differences in durability, depending upon the vehicle and the pigments used. Experiments in animal nutrition, especially with chickens and pigeons, have been conducted with reference to deficiencies of some grains. Minor investigations and numerous qualitative analyses for the public have also been made.

The work of instruction in the department has continued to be very heavy. The interest and ability of members of the department force has developed a steady increase in the interest in advanced work, especially in physiological and nutritional lines. The department is in need of more room for the proper performance of its present duties and for needed developments. The fundamental importance of chemical establishments to the national, industrial and military efficiency has been forcibly demonstrated by the war. Development in these lines should be urged, and will undoubtedly take place, and this institution should have a part in the future movement in this respect.

The department of physics has shared with the departments of chemistry and electrical engineering the great strain which the demand of the war for technically trained men has made. It has been exceedingly difficult to find teachers needed, and there is great danger that the department will lose some of those which it still has. Classes in radio buzzer work have been conducted, which constitutes a contribution to the necessary war work of the nation. Classes in photography, of military value, have also been given and well patronized. The department has been prevented from making growth and development by lack of room, and the appropriation allowed by the legislature in 1917 was not available until July 1, 1918, and because of the great increase in the cost of building materials and the price of labor it will be impossible to carry out adequate plans for increasing the space available for the department. It is highly important that an appropriation of $80,000 or more be made to provide for the necessities of the departments of physics and electrical engineering.

Biological science in this institution is represented by the departments of bacteriology, botany, entomology and zoölogy, all of which are engaged not only in teaching but in research work, and are conducting projects in the Agricultural Experiment Station as well as researches independent of that organization.

The department of bacteriology has suffered seriously in loss of personnel during the biennium. It will be exceedingly difficult for this department to maintain its teaching and investigational force. It has a considerable teaching burden in general and special bacteriological classes and kindred subjects, and is conducting five important Experiment Station projects.

The department has made important contributions to knowledge concerning diseases of poultry, the changes occurring in the production of silage, the conditions that effect success in canning vegetables, and in other lines. The members of the department have published a considerable number of articles in scientific journals. During the early part of the winter, December, 1917-'18, the department conducted, in coöperation with the Camp Funston civil sanitary district, an extensive and laborious investigation of the entire College population in respect to meningitis. About twenty-six hundred cultures were made to determine whether or not individuals were carriers of the disease. This is believed to be the most extensive investigation of this kind ever conducted and to have been of material assistance in checking an epidemic of meningitis. The department makes numerous examinations of water in respect to its sanitary fitness for domestic use and keeps constant observation upon the condition of the College water supply.

The department of botany during the past two years has added materially to its equipment and facilities for study. Twenty compound microscopes have been added. It still needs the proper equipment for teaching plant physiology and for furnishing laboratories for students in advanced work. The research work in connection with the Agricultural Experiment Station has been conducted with special reference to diseases of cereals, fruits and garden crops, and the drouth resistance of forage crops. Especially interesting work has been done in respect to wheat rust, and something has been accomplished in a state survey of plant diseases. Extensive correspondence is required to attend to the inquiries of farmers concerning smuts of cereals and forage crops and their treatment. The department coöperates with the United States Department of Agriculture in its investigations of plant diseases.

The department of entomology has always been an active one and during the biennium has fully maintained its standing. Instruction in entomology was given to over seven hundred students in twenty different courses, including the purely scientific, but developing especially those of economic importance. The department is well equipped and well manned for doing advanced work in instruction and conducting research. It also gives especial attention to assisting the farmers of the state in repressing insect pests and has performed a large service in this field. In the Experiment Station it is carrying on eleven projects of great importance to the state.

This department conducted a very heavy correspondence, requiring the issuance of not less than six thousand letters during the biennium. Members of the department have written two circulars, two Experiment Station bulletins, sixteen articles for scientific journals, and about forty reports and newspaper articles.

Special attention should be given to the extensive correspondence and personal assistance at meetings held for the purpose of advancing the bee industry. With extensive areas of alfalfa and considerable other honey-producing flora in Kansas, the production of honey might be very greatly increased with a clear gain to food production and the addition of much wealth to the state. Forty-four meetings were held in the interest of this industry.

The department of zoölogy has continued its work in instruction, taking care of a total of 3,157 students. Instruction in physiology for the young women has been taken over by the department, to be given in connection with a course in embryology, physiology having previously been handled by the department of veterinary medicine. Instruction in geology is also in charge of this department. The graduate work of the department has increased greatly and is accredited in Harvard, Wisconsin, Chicago and other universities. The principal lines of investigation conducted are in genetics, parasitology, cytology and embryology. Five important Experiment Station projects have been carried on during the biennium. The correspondence with farmers and the poison shipped to them have increased considerably over previous years. The department has continued to contribute to the scientific journals and prepare papers for publication and presentation before scientific societies, the total amounting to about twenty contributions.

The department of economics and sociology has been strengthened by the addition of an instructor who will give special attention to sociology. The members of this department are in active demand for public addresses and lectures in different parts of the state, and the work of instruction offered is freely elected by students in addition to that taken by large classes in required subjects.

The work of the department of history and civics has increased considerably during the biennium and many courses have been developed which are in active demand as elective subjects. The World War has given a new impetus and a new significance to the study of both history and government, especially with reference to modern Europe and comparative government. The department emphasizes the practical aspects and industrial phases of history and the actual political activities in government.

The department of education finds its work materially increasing in scope and importance, especially with reference to the training of teachers in home economics and agriculture, to which increased attention has been given. Nearly all of the courses offered by the department are elective, and the fact that the classes are usually large, and a division of them is frequently called for, shows that the demand on the part of our students for this work is very great. Many of our young women and a considerable number of young men engage in teaching for a longer or shorter period after graduation. Some who are not planning to teach elect work in education because of its general value. With the thorough work which the College gives in cultural, scientific and technical subjects it is possible, by adding to these a few terms of work in professional subjects in education, to enable graduates to prepare for very superior teaching.

An important function conducted by the head of the department of education is that of recommending our graduates and former students for teaching positions. The work of the department is not limited to those desiring to teach, but it assists in placing individuals in other positions whenever an opportunity occurs. Approximately three hundred are assisted to positions each year. This work should be increased and placed upon a more effective basis, especially during the months of July and August.

Members of the department are in large demand as speakers throughout the state. The department head served as food administrator for Riley county during the latter part of the biennium, and from September 1, 1917, to the end of the period covered by this report four-sevenths of the time of another member of the department was released by the College in order that he might become director of vocational education under the State Board of Education in accordance with the provisions of the Smith-Hughes act. The department has experienced considerable difficulty in maintaining a full teaching force.

Because of the importance of the relations of the Summer School to the regular sessions of the College, the position of director of the Summer School was changed to that of dean of the Summer School in January, 1918.

The department of music has made steady progress. The work in this department is wholly elective and is in such demand that the teachers are very fully employed. A three-year curriculum has been organized, leading to a certificate in music, which has been followed by an encouraging number of students. A two-year curriculum in public school music has been organized to meet the insistent demands of students who wish to be prepared to teach music in public schools in addition to other work. An annual music festival was inaugurated in the spring of 1917, and continued in 1918 under the joint management of the departments of music and public speaking, and in 1917-'18 an artists' series course was launched under the same management. All of these enterprises have been successful, both financially and artistically. From time to time, through the influence of the department, fine musical companies are brought to the College and recitals are given by members of the department and advanced students. A free Christmas concert is given by the Choral Society each year.

The department of physical education has made rapid progress in enlisting enthusiastic and harmonious activity on the part of the student body in intramural and intercollegiate athletics. In the women's section of the department especial interest has been developed in swimming and athletic games such as hockey and tennis, as well as in folk dancing and esthetic dancing, in addition to regular gymnasium work.

The entrance of the United States into the World War has given an immense impetus to the work of the department of military science and tactics. Even before the declaration of war a realization of its probable coming had greatly diminished the number of students desiring to escape the military drill required by the institution. November 29, 1917, a unit of the Reserve Officers' Training Corps was authorized by the War Department, and with the beginning of the second semester, January 29, 1918, the corps was formally established. About sixty men enlisted for the advanced work and at the close of the biennium were in training at Fort Sheridan, the total length of the period being six weeks.

The national significance of military training at this and kindred institutions is amply demonstrated by the fact that large numbers of our graduates and former students now hold commissions in the United States army. Brig. Gen. James G. Harbord and Brig. Gen. Eli A. Helmick are the most prominent examples among these. The advantage to the individual of military drill and its value to the nation will not be questioned until many years of peace have caused us to forget the lessons of war.

The library is one of the most important general adjuncts of the entire College, although but a short instructional course is given by its force to the student body. The course in library methods is intended to familiarize students with the methods of making use of the wealth of knowledge stored in books. For 1917-'18 $5,000 was allowed especially for the purchase of important sets of books, and by means of this budget valuable additions to our reference material were made. The department has been active in several special lines, including the loan of books to officers and soldiers at Camp Funston and responding to requests for material, references, bibliographies, etc., for the assistance of clubs, debating societies, high-school teachers, students, etc.

One of the great obstacles to the upbuilding of the library is that under the present arrangement valuable periodicals cannot be bound, and even those accepted for binding by the state printer are handled only after great delay. Many of the books in the library need rebinding. It is an imperative need that adequate facilities be provided by the state for doing the necessary binding for this and other educational institutions. In many cases books bound are not in satisfactory condition when they come from the binder. The establishment of a section for binding in our department of industrial journalism and printing, in which the work might be done and at the same time taught to students, would be a valuable addition to the facilities of the College.

The College has long been in need of more commodious, more convenient and more secure housing for its library, and an effort should be made to obtain a modern fireproof library building at as early a date as possible.

In concluding this report I wish to call especial attention to the imperative necessity for an increase in the salary rate for members of the faculty and employees of this division, as, indeed, for the entire College. The prices of living in all fields have risen so that it is almost impossible for lower-paid members of the faculty to get on decently and comfortably, their salaries being less than the wages of good mechanics. While the pressure for men affects some departments more than others, as has been mentioned in the foregoing report, the shortage of teachers is felt in all departments, and unless salaries can be paid that will compare favorably with the income that men and women may expect in other vocations those of first-class ability will not enter the teaching profession. A strong effort should be made to obtain a recognition of this situation by the legislature and to get an appropriation sufficient to increase salaries adequately.

HOME ECONOMICS.

The biennium has been a period of satisfactory growth and development in the Division of Home Economics. Frequent changes have been made in the personnel of the faculties of the departments within the division, but the policies have in general remained unchanged.

DOMESTIC SCIENCE.

Early in the biennium the head of the department of domestic science visited many of the representative colleges and universities of the East for the purpose of studying the organization and methods of presentation of the various courses in foods. She returned with new interest and enthusiasm and with many new and helpful ideas. These have greatly helped in standardizing and improving the teaching in domestic science.

The institutional phases of home economics have had a very gratifying development. Strong courses in institutional cookery and institutional management were organized and have been given throughout the biennium. The quality of the work given is indicated by the fact that our students have been in demand as directors of cafeterias and have been highly commended by officials of leading hospitals for efficient service as dietitians. A vocational curriculum in lunch-room management one year in length was added at the beginning of the biennium. It has proved to be popular, and the women who have taken it are holding good positions. The cafeteria has been a great success, and has, therefore, served as an excellent laboratory for the classes in institutional cookery.

All of the courses in foods have been slightly modified so as to be consistent with the program of the United States Food Administration. Special courses in food conservation, in home nursing and in nurses' aid have been given.

The department of domestic science has done a limited amount of experimental work during the biennium and has published the following bulletins: "Greens in the Diet," by Margaret H. Haggart; "Meals for Harvest Time," by Jen L. Cox; "Steam Pressure for Home Cooking," by Alice E. Skinner and Ida E. Rigney; "Use of Wheat-saving Cereals," by Helen L. Green, Alice E. Skinner and Lenore Richards; and "One-dish Meals," by Olive A. Sheets.

DOMESTIC ART.

There have been no marked changes in the policies or in the faculty of the department of domestic art during the biennium, and the work has been carried on in a generally satisfactory way. In development of technique the work of the department is highly successful but the educational phases of the courses in textiles and clothing have not progressed so satisfactorily.

The special feature has been active work carried on as an aid to the Red Cross organization. Instructors' training classes in surgical dressings and garment making and classes in surgical dressing and in knitting for output work have been conducted by the department throughout the second year of the biennium. No college credit has been given for the work, but more than 500 students have availed themselves of the opportunity to render definite war service.

HOME ART.

The department of home art teaches the basic principles of design and color, together with the application of these principles to the problems of clothing and of house and civic decoration. Recognizing the fact that appreciation of the beautiful is cultivated through impressions received in everyday surroundings, and not through occasional visits to art galleries, it has been the aim of the department of home art to cultivate the taste of its students in regard to the art quality in everyday objects. The results have been generally satisfactory. While the equipment of the department is meager, all available illustrative material has been well used. Under the direction of the department, exhibits of paintings, prints and pottery and of the work of some distinctive art schools were shown.

The head of the department of home art was absent on leave during the second year of the biennium, her place being filled temporarily. During the biennium she gave lectures before local societies, at art exhibits, and before Farm and Home Week audiences. She also acted as chairman of the drawing round table of the Kansas State Teachers' Association and of the household arts section of the Western Drawing and Manual Training Teachers' Association.

SPECIAL WAR WORK.

The dean of the Division of Home Economics has performed the duties of the federal home economics director for Kansas, under the United States Food Administration, having been appointed to this office in November, 1917. She made two trips to Washington for conference and instruction, presented the Food Administration program to twenty-seven audiences, distributed several thousand copies of food-conservation literature, directed part of the conference programs held on two different occasions for the home-demonstration emergency agents of the state, acted as adviser to the food conservation department of the woman's committee of the Kansas State Council of Defense and of the State Suffrage Association.

The department of domestic science conducted classes in the courses in food conservation, in home nursing and in nurses' aid recommended by the education department of the United States Food Administration and the Red Cross. More than 600 students were enrolled. College credit was given for home nursing. The department furnished copy to the Kansas State Council of Defense for two bulletins—"Use of Wheat-saving Cereals" and "One-dish Meals." The department fed in the cafeteria for eight weeks 260 men of the first military training detachment, and for four weeks 515 men in the second detachment.

The department of domestic art conducted instructors' classes in the making of surgical dressings and hospital garments and supervised the making of surgical dressings and knitted garments for output by the student volunteers.

Minor changes have been made in the home economics building, and others are authorized, the most important of which include a new suite of office rooms for the dean of women and new quarters for the Young Women's Christian Association.

NEW PROJECTS.

The most urgent need for reorganization in the Division of Home Economics is in the department of domestic science. At present this department includes the work in foods and dietetics and the courses in household and institutional management, together with those in sanitation and public health. The interests of the division and of the College will be served by separating these courses into two groups—one to include the subjects of foods, nutrition and dietetics; the second to embrace the more general courses pertaining to health and household and institutional administration.

It is recommended that a new professorship be established in foods and nutrition and that the present professorship in domestic science be changed to household economy.

It is further recommended that development of graduate courses and research work in foods and nutrition be provided for by the establishment of a nutrition laboratory. There is ample space in the Home Economics Hall for such a laboratory. The cost of equipment will not exceed $1,200.

It is also recommended that the project of the coöperative house at present directed by the department of domestic science be continued under the department of household economy, and that as soon as practicable an institutional laundry be added to the equipment of this department. The coöperative house serves as a laboratory for the teaching of household management. The students living in the house make all purchases for the house, keep the accounts and record all transactions, and do the housework, under the direct supervision of a member of the faculty. The equipment of the house is being furnished by the present department of domestic science. The expenses of maintenance are to be prorated among the students living in the house. An institutional laundry would serve as a laboratory for teaching the management of laundries, making an important addition to the work in institutional administration. It might also serve the practical purpose of reducing the department expenses for laundry.

For the development of the department of domestic art it is recommended that a textiles laboratory be installed and equipped. The modern teaching of textiles includes laboratory experiments to determine the effects of heat, moisture and chemicals on the various fibers, fabrics and dyes used in the manufacture of clothing materials. The cost of suitable equipment for a textiles laboratory will be from $600 to $700.

The department of home art has plans for the organization of teachers' training classes in occupational therapy. Since it is recognized that a workshop schedule in wards utilized as occupational therapy will afford intellectual and manual training as well as mental diversion for our returned soldiers, there is a demand for teachers to take charge of this phase of reconstruction aid work. It is thought that with little extra equipment teachers' training classes in the following crafts could be conducted: basketry, block printing, clay modeling, stenciling, and metal and leather work. Such courses would materially strengthen the work of the department of home art. It is recommended that funds to the amount of $400 be provided for this work. It is also recommended that rooms in the attic of the home economics building be finished for art exhibit and lecture halls. The department of home art proposes to develop an art museum which will be a valuable addition to the courses in design and a source of inspiration to the entire student body. The cost of the museum as planned will be about $1,500.

In addition to the necessity of providing for the various projects enumerated and discussed in the foregoing report, there will be the need for an increase in maintenance funds for the several departments. This statement is fully warranted by the increased cost of practically every article to be purchased. It is recommended, therefore, that an increase of 30 percent be made in the maintenance funds for the division.

In the office of the dean of the division additional clerical help will be needed. The work upon students' records, together with the dean's correspondence, is more than the one clerk now employed can do. While the dean has no desire to shirk the direction of the academic activities of the division or to neglect her duty in counseling students on matters pertaining to their courses of study, it is, in her judgment, poor economy to use professional training which might be employed in teaching or in scientific research for office work of purely clerical nature.

SALARIES.

During the coming biennium the Division of Home Economics will need to increase its expenditures for salaries as well as for equipment and general maintenance.

The war and its necessities have brought a realization of the importance of the study of domestic science. Many new departments have been organized in colleges which previous to the war did not offer such work. This expansion of the teaching field, together with the increased opportunities for domestic science experts in government and hospital service and in commercial enterprises, has created a demand greater than the present supply of well-trained workers. The only way to secure and retain a suitable staff in the department of domestic science is to offer salaries that are not only adequate for the present cost of living, but are commensurate with the work and training demanded, and also with incomes from work of similar grade in other institutions.

Continued low salaries, with lack of appreciation of the educational possibilities of domestic art and of art as applied in the home, have influenced many able women to leave these lines of work for positions of more lucrative nature, or with more evident possibilities of development. If it is the desire to retain the efficient workers we now have and to add to their number, the salaries both in the department of domestic art and in the department of home art must be increased.

In view of conditions recited above it is recommended that an increase of 33 percent be made in the total expenditures for salaries in the division; this increase to be used in part for increasing present salaries, but to provide also for a new professorship in foods and nutrition, to permit the addition of one instructor in domestic art and one in home art, and to secure a second clerk in the office of the dean of the division.

SUMMER SCHOOL.

The Summer School sessions of the Kansas State Agricultural College have become a permanent part of the work of the institution. The attendance, quality and type of students and the general spirit of the sessions are especially gratifying. There has been a constant though small growth in attendance. The attendance for the first year of the biennium was 536; for the second year, 587.

THE SERVICE OF THE SUMMER SCHOOL.

The Summer Session serves, in the main, a different class from that served by the regular College sessions. Summer School students belong in general to three principal groups: (1) those who have been teaching and wish to get in touch with newer movements, or to fit themselves for better positions; (2) those who have had a general preparation and wish to take work in one of the fields in which the College specializes; and (3) students who choose to attend school the year round and thus reduce the time lost from employment while securing an education.

Teachers attend Summer School in order that they may meet the higher standards required of them. They cannot secure the advanced work unless it is offered during the period when the schools are not in session. The Summer School is especially serviceable in war time, with the consequent shortage of workers, since teachers may without leaving their work prepare themselves for newer and more responsible positions. By alternating certain courses in the departments and offering one course every other year it is possible for teachers and others to get a major portion of the work in any department by attending successive years. At the same time the cost of teaching is maintained on an economic basis.

The present war-time demand for technically trained workers makes it desirable for college students to complete their work quickly or that they take special work in some branch of science.

The great demand is for teachers of agriculture, mechanic arts, home economics, and science, the fields in which the College specializes. To meet this demand the Summer School always offers special opportunities in these fields. The number of those who, by attending each summer school, enter the fields in which the present scarcity exists, is increasing.

The Summer School makes use of the College equipment at a time when it would otherwise remain idle, at a great economic advantage to the state.

THE SUMMER SCHOOL FACULTY.

Only those members of the regular teaching staff teach in Summer School who are best qualified to give the courses for which there is a demand. On this account the quality of teaching done in the Summer School ranks with the best done during the year. In order that the Summer School may be the means of bringing new ideas and inspiration to teachers, specialists from other states and institutions have been brought to the school as instructors and lecturers.

The result of bringing these people from other states and institutions has been most helpful and suggestive. Their work has influenced education in the state, not only through the influence upon the students of the Summer School, but upon the College faculty as well.

SPECIAL FEATURES OF THE SUMMER SCHOOL.

A special feature of the Summer School has been the series of lectures and conferences held. Each year during the Summer School session the county superintendents of the state meet at the College. A lecture on problems of rural education is always provided by the College. Superintendent S. A. Cook, of Baltimore county, Maryland, lectured before the county superintendents in 1916-'17. In addition to the conference of county superintendents, a county conference on vocational education is held each year. The conference for 1915-'16 was devoted chiefly to agricultural and rural educational problems. Mr. L. S. Hawkins lectured before this conference. In 1915-'16 the conference gave its time to the discussion of vocational agriculture under the Smith-Hughes law. W. D. Ross, state superintendent of public instruction, discussed the state board's plans before the conference. Dr. David Snedden, of Teachers' College, Columbia University, also spoke before the conference. Both of these conferences were widely attended by superintendents and principals, in addition to those attending the Summer School.

Other general lectures and moving pictures of an educational nature have been special features of the Summer School. These are bringing new ideas and inspiration to the teachers of the state. Since these ideas are carried to the schools at once, the people of the state realize upon their investment immediately.

FUTURE WORK.

The service rendered by the Summer School and its popularity justify its continuance and enlargement. Since standards for teachers are constantly growing higher, the state is in duty bound to offer teachers now in service an opportunity to meet these standards without dropping out of employment for a year. This is especially important during war time, when many teachers have been called into other types of service. Work in high-school agriculture has suffered especially as a result of young men being called into military service. Therefore, it is highly important that the Summer School offer (1) courses for young women which will fit them to teach the regular one-unit course in agriculture generally offered in high schools; (2) special courses for experienced high-school teachers who wish to fit themselves as teachers of vocational agriculture.

The Summer School should also offer special opportunity for advanced training in chemistry and mechanic arts, and perhaps other sciences.

The demand for clerical help is so great that instruction in shorthand and typewriting should become a regular part of the College work.

The scarcity of college-trained workers may require that the Summer Session be enlarged and lengthened so that the institution may render the fullest service while the war is in progress, as well as in the reconstruction period after the close of the war.

The Summer School should offer special opportunity to returned soldiers to complete their college training. It is probable that state educational institutions equipped as is the Kansas Agricultural College will be called upon to aid in the rehabilitation of returned soldiers. The College should look forward to this work, beginning with the Summer Session of 1918-'19.

SCHOOL OF AGRICULTURE.

The School of Agriculture has continued its special service of providing practical vocational education combined with academic training to secondary students, at the same time training for the best type of citizenship. Its students belong, in the main, to one of the following classes: (1) those coming from communities in which high schools do not offer or are not equipped to give the kind of vocational work they desire; (2) young people who can attend only a portion of the year, therefore cannot get work during successive years in their home high schools; (3) students of mature age who have failed to secure a high-school education at the time they should regularly have taken that work; (4) high-school students of normal age who lack some of the high-school credits required for College entrance.

ENROLLMENT.

The enrollment of the School of Agriculture has suffered especially because of the war. A large percentage of its young people come from homes in which it is necessary that every member of the family shall be an active worker. The shortage of labor, therefore, affects this group more than it affects the College students. The enrollment for the first year of the biennium was 422; for the second year, 231. There were twenty-two graduates from the School of Agriculture during the biennium.

WAR SERVICE.

The students in the School of Agriculture have taken an active part in all the war-time activities which have had a place in the College life. Many of the young men are in active military service and a proportionately large number of them have won commissions.

RECOMMENDATIONS.

The brief experience with the semester plan would indicate that for the sake of those students who can be spared from work on the home farm, the return to the term or quarter basis would be desirable. This would enable students to spend one or two quarters a year here and then return to the farm for the busy part of the year. This is especially desirable in the war period in consideration of the shortage of labor.

In any future reorganization of the curricula in the School of Agriculture the number of two-hour and three-hour courses should be reduced. Experience in vocational education as well as academic education shows that relatively short intensive courses will accomplish more than the longer extensive courses. Furthermore, the School of Agriculture should serve, above all others, those students who can be spared from home only limited periods. With the present arrangement of courses covering two or three hours a week for a year, or even two years, the student is compelled to remain in school an unduly long period to get much specific training. Courses should be made short and intensive, especially courses in cooking and sewing.

The acceptance of the provisions of the Smith-Hughes law makes it highly desirable that at some place in the state there should be a laboratory school in which problems in vocational education may be solved. These problems will arise continually in schools operating under the Smith-Hughes law. The School of Agriculture is the logical place for such work. The courses in the School of Agriculture should be modified to comply with the Smith-Hughes requirements as nearly as possible. The content of the courses should be worked out by the departments of the College so as to serve as helps to teachers who undertake the work in Kansas high schools.

The School of Agriculture should offer to the department of education an opportunity to give candidates for teaching positions experience in practice teaching. This can be accomplished by coöperative arrangements between the department of education and the School of Agriculture.

COLLEGE EXTENSION.

EXPANSION.

Through its rapidly growing extension activities the Kansas State Agricultural College has been able to render enlarged service to the state during the biennium. The increasing interest in the principles underlying progress in farming, in home-making and in the building of the agricultural community and our government war program have been the underlying causes for this expansion. The personnel of the Extension Division has increased more than 200 percent in two years, in spite of the fact that there have been 58 resignations since we entered the war, 19 persons going into war service, 2 into Red Cross work, 10 taking up farming, 12 accepting more lucrative positions, and 15 resigning for other causes. On June 30, 1916, there were 47 people engaged in extension work; on June 30, 1918, there were 144 so engaged. In addition, the teaching faculty of the College and of the Experiment Station has devoted much time to extension work.

FINANCIAL SUPPORT.

The extension work has been made possible through liberal support by the state, by the federal government, by counties, and from private sources. From the Smith-Lever funds appropriated by the government $36,685 was used in 1917 and $48,814.55 in 1918. As an offset to this fund the Kansas legislature set aside $26,685 for 1917 and $38,814.55 for 1918.

The Agricultural College, from funds appropriated to it, set aside $30,000 each year for the extension service. The United States Department of Agriculture, from its regular funds and from a large war emergency appropriation, assigned sufficient funds to Kansas to pay part, and in some cases all, of the salaries of county agents, home demonstration agents, club leaders, and some extension specialists, so that more than 75 percent of the members of the extension faculty are coöperatively employed by the Agricultural College and the United States Department of Agriculture.

The farm bureaus in the state are closely associated with the extension service of the College and the United States Department of Agriculture, and in addition to membership fees receive support from county commissioners. In 1917 the amount so received equalled approximately $22,324.22, and in 1918, $36,515.05. Miscellaneous fees to the amount of $12,580.21 in 1917 and $4,704.13 in 1918 also were received and used by the extension service.

ORGANIZATION.

The extension activities are closely coördinated and organized as one of the five divisions of the College, thus making for economy and effectiveness of expenditure and preventing overlapping, duplication and friction. For administrative efficiency the Extension Division is subdivided into departments, with department heads responsible to the dean. There were five departments at the beginning of the biennium and eight at the end. These departments are: County agent work, institutes, extension schools and specialists, home demonstration agents, home economics, boys' and girls' club work, rural service, irrigation and drainage, and home-study service.

The work of the departments is organized on a project basis. There were eighteen of these projects the first year of the biennium and twenty-two the last year, in addition to numerous special war projects. Since a short time before the United States entered the war all projects have been so shaped as to meet the various war needs. The entire division, therefore, functions as a war machine and is as helpful as possible in every activity relating to food production and conservation as well as to many other war activities. The main projects are as follows: Organization and administration, county agent work, extension schools, dairy husbandry, crops and soils, animal husbandry, poultry husbandry, horticulture, entomology, farm management, hog-cholera educational work, boys' and girls' club work, home economics, drainage and irrigation, farmers' institutes, home-study service, rural organization, and farm labor.

In conducting the work under these projects thorough organization in the country is an essential requirement. The outstanding organization for this purpose is the county farm bureau served by a county agent, and where possible a home demonstration agent and a county club leader. Projects conducted in farm bureau counties are many times more effective than in counties where no such organization exists. The rapid expansion of farm bureau work, therefore, was a foregone conclusion, and while there were twenty farm bureaus served by county agents at the beginning of the biennium, there were forty-four bureaus so served and eighteen districts of two or more counties each served by emergency agents at the end of the biennium, and a total of fifty-eight men associated with the county agent work, twenty-six women in home demonstration work, and twenty-four men and women in the boys' and girls' club work. The farm bureau system is strong because it encourages the initiative of farm men and women locally in their community and is the best known training ground for rural leadership. Its aim is to coöperate with existing organizations wherever found and to bring into being community committees wherever needed, so that all available forces may unite in promoting those things of greatest interest and value to the farm communities. The underlying principle, therefore, of the farm bureau is self-help through proper organization. The members of the extension service, including the county agents, the women agents and the extension specialists, are the trained servants of these organizations, willing and ready to help at every opportunity.

So necessary and valuable have the farm bureaus and the county agents become, especially as war machines, that it has been necessary to appoint several emergency agents in counties not yet organized into farm bureaus to help these counties organize and to conduct the essential war tasks. In fact, the farm bureaus and the county agents have been the most effective agencies through which the government has been able to conduct its agricultural war programs in the country.

EDUCATIONAL ACTIVITIES.

In the county agent work 1,941 meetings were held in 1916 and 2,415 meetings in 1917 for the consideration of matters vital to the farm, the home and the war, with a total attendance of 205,194 for the two years. In addition, 17,781 farms were visited personally by county agents and 24,668 telephone calls for information came to the county agent's office during that period.

The farmers' institute organizations in the state, in coöperation with farm bureaus and other farmers' organizations, have continued to serve as agencies through which much educational work in regard to agriculture and home economics has been conducted. During the biennium the more than 350 farmers' institute organizations in the state conducted 890 sessions, at which men and women representatives of the Agricultural College were present. These organizations had a membership of approximately 10,000 and an attendance of between 50,000 and 100,000 each year. Forty-two five-day extension schools in agriculture and home economics also were held, the average attendance at each session being 33 men and 34 women for first-year schools and 55 men and 35 women for second-year schools. Sixty-four five-day extension schools for the teaching of home economics alone were held during the biennium, with an attendance of 25 to 40 at each school. Thirteen community assemblies, at which agriculture, home economics and community welfare projects were considered, were held, with an attendance of 28,012. A lecture course was presented in 29 communities in 1916-'17, with an attendance of 22,159 at the 142 meetings held. During 1917-'18 a five-number lecture course was conducted in 15 rural communities, with an attendance of 18,750. During the last year special attention was devoted to the war situation in these courses. Through local leaders in community work some activity for community welfare has been handled in 600 different communities each year.

The club work among the boys and girls has been a strong feature of the extension service. Clubs have been conducted in bread making, canning, corn growing, garment making, pig raising, poultry production, sorghum growing, baby-beef production, and beekeeping. In 1917, 492 clubs were organized, with a total membership of 14,299. In 1918 by July 1 there were organized 592 clubs, which will have a membership, possibly, of between 15,000 and 20,000 before the end of the year. Thirty-two persons were employed at different times during the year in the club work jointly by the College, the United States Department of Agriculture, and local people, to assist in promoting and overseeing the club work. In some cases these leaders were employed during the entire summer season; in other cases for only a few weeks at a time. There should be a county club leader devoting six to twelve months a year to the club work in each agricultural county in the state, this leader, in turn to be assisted by local leaders in each community.

In the club work 1,760 meetings were conducted by representatives of the state leader's office during the two years, with an attendance of 162,164 persons, and 2,937 meetings conducted by county club leaders, with an attendance of 68,804.

The home demonstration agents, now 22 in number, have been especially helpful in food-conservation work. All have been appointed during the last year of the biennium. They attended 642 meetings of local organizations and gave lectures and demonstrations before 1,084 groups, with a total attendance of 80,000. They visited during the year 3,678 homes to help with home problems.

The Farm and Home Week conducted at the Agricultural College brought an attendance of 1,800 in 1917 and 1,500 in 1918, practically every county in the state being represented.

After eliminating unavoidable duplication in figures of attendance at meetings in the promotion of various extension activities, it is a conservative estimate that more than 400,000 people in Kansas were reached by some extension activity each year. If to these are added those reached through bulletins and material furnished to the press of the state, it is certain that every home was reached in some way during the biennium.

DEFINITE ACCOMPLISHMENTS.

It is impossible to give the economic and educational results, even approximately, of so extensive an educational system as the extension service of the College. One might as well attempt to give the economic results of the school system in any one year, because the work of the extension service is in the main educational and inspirational in character and the people themselves determine largely what the results shall be.

Some of the outstanding features, however, are very noticeable even to the casual observer, and may be touched upon. During the summer of 1917 the county agent force and others of the extension service coöperated with the Kansas State Council of Defense in a comprehensive campaign for increasing the acreage of wheat. Meetings to promote increased wheat production were conducted in practically all wheat-growing counties, and in the drouth-stricken counties effective help was given in securing seed and in using funds for the purchase of seed provided by the Kansas State Council of Defense. In one county alone the county agent was instrumental in securing $20,000 from the Council of Defense for the purchase of 9,540 bushels of seed wheat. Fully 70 percent of the 12,700 acres sown with this seed would not have been sown had not the seed been furnished in this manner. In one of the wealthy counties of the state the county agent and the farm bureau secured and distributed to 490 farmers 14 carloads of improved seed wheat. Similar work was duplicated again and again in other counties of the state.

In the spring of 1918 a survey of the seed and labor needed by farmers was considered essential by the federal government and the State Council of Defense. The county agents, extension specialists and farm bureaus, in coöperation with the Council of Defense and the schools of the state, made a survey in 68 of the 105 counties, and determined what seed was needed, where it could be secured, and what labor would be needed during the year. County lists of seed wanted or for sale were prepared by the county agents on the basis of this survey, and sufficient good seed was found so that it was not necessary for any farmer in the state to plant inferior seed. Thirty thousand samples of seed from farmers were sent to the Agricultural College and tested for them free of charge. The vigorous seed campaign thus conducted influenced a very large proportion of farmers of the state to test their seed at home before planting, and Kansas has never had a better stand of intertilled crops than in the spring of 1918.

On the basis of the labor survey, it was estimated by the farm labor specialist, E. E. Frizell, that Kansas would need upwards of 90,000 men to help handle the 1918 wheat harvest. Dependence could not be placed on floating labor as in previous years. The farm labor specialist, therefore, and the county agents, coöperating with the State Council of Defense, early started a campaign for the enlistment of men and boys from the towns and cities to help in meeting the labor situation. In this campaign approximately 30,000 men were enlisted. Before the harvest commenced every county agent, in connection with the farm bureau which he served, established clearing offices for labor, so that floating labor and enlisted labor would be directed to points where needed. The Department of Labor of the federal government also established eighteen offices throughout the wheat belt to help in the labor distribution. Through the joint efforts of these offices 45,000 harvest laborers were supplied to farmers, and in addition thousands of men, influenced by the campaign for harvest labor, who did not clear through these offices, went into the harvest fields. It is estimated that between 60,000 and 90,000 men were thus directed to points where labor was needed, and the harvest of 1918, therefore, was handled more satisfactorily and with less loss of grain than in normal times. Through the activities of the farm-labor specialist, county agents and farm bureaus, eight district conferences and one state conference of farmers were held for the purpose of agreeing on a wage scale for harvest labor that would be fair to all parties. A scale was adopted and approved by the farmers, and with few local exceptions was effective throughout the wheat belt. This was the first attempt of any state to establish a uniform harvest wage scale, and was eminently successful, not only in preventing destructive competition for labor, but in supplying labor at a good wage to those who wanted to work.

County agents have been called upon time and again by the federal government to conduct surveys, to give information of every kind with reference to agriculture, and to serve on committees. In connection with the threshing committees appointed by the United States Food Administration, the agents assisted in bringing farmers and threshermen together to agree on suitable prices for threshing. They helped to inspect threshing machines to see if clean work was done, and have had charge of the reports of threshermen required by the government.

In marketing activities the farm bureaus and county agents have given much assistance, especially through the for-sale and exchange lists of seed and livestock prepared and published by the various farm bureaus. In one month in 1918 more than $1,000,000 worth of seed and livestock were sold from farm to farm through this agency. Coöperative livestock shipping associations and coöperative associations for the purchase of dairy stock also have been organized through their help.

A special state-wide campaign for increased hog production was conducted in the fall of 1917, and in those sections where corn was not a failure resulted in a large increase in the number of pigs produced. Educational meetings with regard to hog cholera were held in every community in seven counties. Two campaigns for increasing the number of silos in Kansas were conducted, one covering thirty-three counties in western Kansas, and one state-wide. These served as an inspiration to many to build silos and conserve feed. Judges have been furnished for most of the county fairs in Kansas each year. Thirty-two colt shows were held. A campaign for an increase in wool production was conducted in eighteen counties, and approximately 15,000 grade ewes were brought into the state in a few months in 1918. A continuous educational campaign for the effective handling of the farm business has been under way during the biennium and 2,879 farmers were given individual assistance in starting accounts. A farm account book was prepared and 70,000 copies were printed, in coöperation with the Kansas Bankers' Association, and distributed to farmers. In the irrigation and drainage work assistance was rendered in the planning of drainage and irrigation systems in 46 different counties on 172 different projects.

Gardening campaigns were conducted during both years in coöperation with the State Council of Defense. In 1917 it is estimated that the areas devoted to gardens were increased more than 100 percent. The canning campaigns conducted through the club workers, the home economics workers, and mother-daughter canning clubs resulted in state-wide interest in the preservation of vegetables and fruits. In 1917, 236,679 quarts of canned products were prepared by the mother-daughter canning clubs alone, and the stimulus thus given to the canning and preservation of food was state-wide and of untold value both from the food conservation and the educational standpoint.

The effectiveness of the home demonstration agents and women specialists in campaigns for food conservation and the use of substitutes, conducted in coöperation with the Food Administration and Council of Defense, is noted by a survey made in 5,607 homes in five cities and 9,194 homes in the state. It was found that in these homes 1,366,000 pounds of wheat flour were saved through the use of substitutes during the period of from four to eight weeks.

Many other educational campaigns were conducted during the two years, such as for grasshopper and Hessian fly control, the prevention of insects and diseases in orchard and garden, increase in poultry and dairy production, better feeding methods, better breeding, and better seed selection and seed testing. Space will permit discussions of neither methods nor results of all of these.

As follow-up work to the field work in extension, reading, extension and credit courses by correspondence have been conducted. Eighty-nine extension and credit courses and 35 reading courses based upon bulletins were offered the first year and 120 extension and credit courses and 220 reading courses the second year, with an enrollment for the biennium of 308 in extension courses, 358 in credit courses, and 10,567 in the short reading courses based upon bulletins.

SUGGESTIONS FOR THE FUTURE.

Early organization of farm bureaus and supplying of county agents in those counties that are not now supplied are most desirable. This should be accompanied by a rapid expansion in the home demonstration agent work and the employment of county club leaders until a large proportion of the counties of the state have strong farm bureaus, served by county agents for farming interests, home demonstration agents for home interests, and boys' and girls' club leaders for the interests of young people. Salaries for these agents should be such that well-trained men and women may be kept in these positions. Counties where farm bureaus are organized recognize the exceptional value of the organization, and it is essential that they as well as the state to an increasing extent make adequate appropriations so that well-trained agents may be secured and kept and the most effective work may be done. To support and supplement these increasing county forces, adequate expansion of the force of specialists and administration is necessary. The increasing Smith-Lever funds secured from the federal government, when offset by equal state appropriations, will do much to meet the financial requirements of this expanding work.

When victory has come the reconstruction period will follow. Problems in agriculture and rural life which are not now clearly seen will then be encountered. These problems can be solved only if the people on the farm, adequately organized with strong leaders, coöperating with their educational institutions, give to them their best thought and effort.

FINANCIAL STATEMENT.

Appended will be found a tabular statement showing appropriations, expenditures and balances of funds assigned for the use of the College, the Agricultural Experiment Station and the various substations for the biennium ending June 30, 1918.

Respectfully submitted.

W. M. JARDINE, *President.*

KANSAS STATE AGRICULTURAL COLLEGE—STATE FUNDS.

STATEMENT OF BALANCES, APPROPRIATIONS AND EXPENDITURES FOR THE BIENNIUM ENDING JUNE 30, 1918.

FUNDS.	Balance June 30, 1916.	Appropriations.		Fees collected.		Expenditures.		Balance June 30, 1918.
		1916-'17.	1917-'18.	1916-'17.	1917-'18.	1916-'17.	1917-'18.	
Salaries	....	....	$347,500.00	....	....	....	$347,500.00	....
Maintenance	$39.70	$514,500.00	187,000.00	....	....	$514,395.18	187,144.52	....
Repairs and improvements	.97	25,000.00	25,000.00	....	....	23,147.25	26,010.42	$843.30
President's contingent	6.69	500.00	500.00	....	....	469.98	269.59	267.12
Purchase of land	....	....	80,000.00	....	....	....	79,850.50	149.50
Wagon sheds for agriculture	....	850.00	....	....	....	850.00	....	....
Horticulture barn	....	1,500.00	....	....	....	1,491.31	....	8.69
State Smith-Lever	....	26,696.00	38,816.00	....	....	26,696.00	38,816.00	....
Agricultural College fees	56,391.54	....	....	$228,341.36	$336,122.80	215,071.66	293,360.51	112,423.53
Fertilizer fees	1,716.31	....	....	2,450.00	3,965.00	2,681.80	2,179.62	3,269.89
Student health	2,225.98	....	....	3,544.00	3,708.58	3,785.56	4,204.18	1,488.82
Feeding stuffs	760.77	....	....	10,311.52	10,727.08	8,977.53	10,077.41	2,744.43
Livestock remedy fees	440.83	....	....	930.23	914.40	695.38	865.48	724.60
Agricultural College interest	16,745.10	....	....	27,025.90	24,877.23	27,603.90	39,643.99	1,400.34
SUBSTATIONS.								
Fort Hays	6,551.32	22,500.00	10,000.00	49,081.79	39,849.21	55,348.94	60,777.68	11,855.70
Garden City	1,881.91	5,000.00	5,000.00	1,100.21	1,892.75	6,603.77	7,601.37	669.73
Colby	992.77	3,000.00	2,500.00	2,272.67	1,639.67	3,736.26	4,805.27	1,863.58
Tribune	.47	2,500.00	2,000.00	542.82	301.90	3,020.29	1,660.23	664.67
Dodge	1,245.99	2,000.00	....	1,125.17	....	2,296.84	2,074.32	....
Totals	$89,000.35	$604,046.00	$698,316.00	$326,725.67	$423,998.62	$896,871.65	$1,106,841.09	$138,373.90

BIENNIAL REPORT

OF THE

MANUAL TRAINING NORMAL SCHOOL

PITTSBURG, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Governor.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

RESIDENT OFFICER.

W. A. BRANDENBURG.............President.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1918
7-5159

REPORT OF THE PRESIDENT.

To the State Board of Administration:

GENTLEMEN—In compliance with your request, and in conformity to the law creating your body, I take pleasure in submitting this brief report of the State Manual Training Normal School for the biennium beginning July 1, 1916, and closing June 30, 1918.

To this institution the present biennium has been a season of unprecedented activity and anxiety in educational work. The present great war in which we are engaged has extended over the greater part of the biennium, and has wrought wonderful confusion and modification in the old-time educational program and policies. We are happy to report that the institution has tried to do its utmost to meet, in an effective and creditable way, every confidence and responsibility placed upon it by reason of these changed conditions.

It is also gratifying at this time to report an ever-increasing enrollment during the entire period. This is not because the students and graduates have not responded to their country's call. There are now over 700 names of graduates and students of the State Manual Training Normal School on the army roll. There are, perhaps, many others whose names we have not been able to secure. This does not include about 260 members of the present Students' Army Training Corps now at the institution.

Already ten men from the faculty of the institution have engaged in war work. One other is engaged in other public service related to the war. We would not be true to the devoted services of this faculty, both men and women alike, if we did not mention the enthusiastic, untiring and effective efforts and coöperation of every member in extending the service of the institution to the state of Kansas and the meeting of war demands.

IMPROVEMENTS TO THE PLANT.

The 1917 legislature made an appropriation for the building of a general science and household economics building. The contract for this building was let to Mr. J. M. Leeper, November, 1917. On account of difficulty in securing materials and on account of shortage of labor, progress in the construction of this building has been rather slow; but we are pleased to report that everything seems to be moving along nicely at the present time, and while the building cannot be completed in January, 1919, according to terms of the contract, barring unforeseen exigencies it should be completed not later than May 1, 1919. An appropriation of $200,000 seemed adequate, and would have been sufficient to erect the building proposed, but the high cost of material and the advance in labor has made it impossible to complete the building as was estimated when the appropriation was made. When this building is completed it will give us the laboratory quarters and facilities which have been so greatly needed during the past four or five years.

The legislature of 1917 also made an appropriation of $3,000 to be expended in the beginning of a new athletic and recreation field. All of this money will have been spent by the close of the biennium, and the field will have been splendidly begun. The grading has been practically completed, a quarter-mile track has been laid out and graded, also curbed completely on the inside and partially on the outside. It has not been possible to fence the field, neither to provide any bleachers, and many other things which will be necessary in the immediate future for its completion.

An appropriation of $3,500 was made by the legislature for the upkeep of buildings and grounds. It had become necessary to employ a gardener for the grounds. This was done, and the results thus far, even with the very limited means, have been most gratifying. Our campus is very much improved in appearance, but what has been done is only a beginning of what must be done within the next few years. It is needless for me to call your attention to the fact that $3,500 for the upkeep of the buildings and grounds of this institution is not more than half the very minimum necessary amount. We sincerely hope that the next legislature will provide a more nearly adequate amount for the upkeep of the buildings, and for the adequate care of the grounds, which amount should be at least $7,500.

RELATION OF INSTITUTION TO GOVERNMENT IN WAR EMERGENCY COURSES.

In the latter part of July, 1917, there were organized in Crawford county two batteries, C and D, 130th heavy field artillery. These two batteries comprised about 400 men. They were in need of quarters. We tendered them the use of the temporary auditorium for barracks, and of other parts of the institution for office quarters. The government placed in charge a major as commanding officer, and a staff consisting of several assistants. The Normal cafeteria provided meals for these batteries during August, September and most of October, when they were finally transferred to Camp Doniphan, Okla. It will always be one of the pleasant memories of the institution that it accommodated and made as comfortable and profitable as possible the two or three months' stay of these batteries while getting ready for the patriotic service which they are now and for some months have been rendering as two units on the western front in France. Many of the members of these batteries were our own students and graduates.

As soon as the institution opened in September, 1917, every member of the faculty was anxiously awaiting an opportunity to be of any possible service in war emergency work. The household economic department organized over 100 young women in Red Cross work, and under the direction of this department over 700 garments were made and sent to the camps in America and across the waters.

Miss Owen, head of the English department, represented the national organization for the adoption of the war orphans of France, and through her efforts succeeded in securing pledges for the support of 115 French orphans. Through the efforts of her department in organizing student help they sent many paraffin candles to the soldier boys in the dugouts in France.

The home economics department organized short courses for groups in easy reach of the institution, where instructors gave lectures and carried on demonstrations in food conservation, garment renovation, etc.

Numbers of the men of our faculty were engaged in every war emergency campaign, lecturing, canvassing and helping to carry out the various requests of our government.

While in some respects this has all been confusing to our regular educational program, in many other respects our faculty is stronger and richer in spirit and devotion to duty than it could otherwise possibly have been.

EXTENDED SERVICES.

While there has been an increase in the residence attendance of the institution over any biennium past, the extension services of the institution have also been extended. Last year, under the direct supervision and direction of the institution, extension work was organized for teachers in the following centers:

Pittsburg.
Galena.
Iola.
Caney.
Chetopa.
Scammon.
Boicourt.
Savonburg.
Arkansas City.
McCune.
Kansas City.
Weir City.
Frontenac.
Mulberry.
Elsmore.
La Cygne.
Arcadia.
Olathe.
Fort Scott.
Mound City.
Hutchinson.
Prescott.
Piper.
Bartlett.
Columbus.
Coffeyville.
Erie.
Chanute.
Cherokee.
Independence.
Pleasanton.
St. Paul.
Parsons.
Edna.
Cherryvale.
Lansing.
Joplin, Mo.
Peru.
West Mineral.
Arma.
Girard.
Chautauqua.
Franklin.
Baxter Springs.
Valeda.
Webb City, Mo.
Carthage, Mo.
Fulton.

There were enrolled in these centers combined 802 teachers. These persons were all teachers employed in the public schools of the respective communities named. During the year approximately 5,000 semester hours were completed by the combined membership of these extension groups. We are often asked if the carrying on of this extension work, in addition to the regular work of our faculty members, does not entail too great a burden on those members doing the work. In our judgment it does, in the amount each member has of necessity been impelled to carry. We have never made any requests or requirements of our faculty respecting the carrying on of this extension work. It is a voluntary service and done absolutely gratis; but the calls for the work have been so numerous that our faculty has been unwilling not to respond, even beyond that which our judgment suggests they should. We have hoped that after the value and the importance of this sort of service were finally established in the minds of the people of Kansas the legislature would make some special appropriation which would enable us to employ sufficient help to reduce the amount of work carried by each individual member of the faculty to that which is really profitable, in addition to regular work at the institution. As to the benefit of this service to the communities there can be no question where teachers are not permitted to carry more than four hours each semester. More than this amount for the average teacher is apt to require too much of his or her time, and is likely to insure a lower standard of accomplishment than is desirable. As to the value of this work to our faculty there can be no question. The surest way for the faculty of an institution of higher education, and especially a teachers' college, to keep in touch with the conditions and demands of the field for which they are preparing workers is to go into that field and carry on some extension work among teachers, such as this institution has been doing for the past four years. The meeting of the teachers in their respective communities, the meeting of citizens of these communities, the opportunity when out on extension work to visit the schools and see the children at work, enables faculty members to return to their work at the institution with renewed zeal, more inspiration, with broader vision and greater wisdom in the more effective carrying on of their work. We believe there is no surer way for an instructor to render himself or herself less effective, if not useless, in the work of preparing teachers, than to confine his activities wholly to the campus of the institution for a period of four or five years.

Another important phase of extension work which was begun actively at the beginning of the present biennium was that among the men and women in trades, industries and commerce. This work was undertaken for the most part by four departments of the institution—the departments of industrial and applied arts, physical sciences, mathematics, and commerce. A committee was appointed from these departments to organize, supervise and direct the work. It consisted in the opening up of an evening school at the institution, and of the organizing in various centers in close proximity to the institution those persons in trade and industry interested in and ambitious to increase their efficiency and thus place themselves on higher levels of service. The following courses were offered for these groups partially to meet the war emergency demands:

Automobile repairing.
Armature winding.
Carpentry drawing.
Mining courses.
Machine drawing.
Plumbing.
Industrial engineering.
Civil engineering.
Mechanical engineering.
Mathematics.
Laws of contracts and specifications.
Commercial courses.
Automobile electricity.
Carpentry.
Electrician's course.
Machine shop.
Pattern making.
Telegraphy.
Automobile engineering.
Electrical engineering.
Mining engineering.
Chemical and physical sciences.
Physical education and first aid.

In addition to the evening classes at the institution, conducted one to three evenings a week, groups were also organized in these courses in the following centers, which met from one to three evenings a week: Mulberry, Ringo, Arma, Scammon.

The response, both in numbers and interest, was beyond our expectatation for the first year. There were enrolled in all 617 persons, both men and women, and all representing the trades, industries and commercial fields. The enthusiasm of those taking the work was great indeed. We were petitioned and urged to offer the work again this year, and even to enlarge it. Your honorable body has approved the continuation and expansion of this service. A technical bulletin setting forth these courses has been published, and if it had not been for the epidemic of influenza our evening classes would have been organized October 1. They will now be opened on November 4, and we are expecting an attendance of 1,000 to 1,200. Again the question may be raised, Can a teachers' college afford to engage themselves in and give time to this sort of service? To this question, in our judgment, there can be but one answer. That answer is, it certainly can. Far too long the teachers in our public schools and those within institutions of higher learning, especially our teacher colleges, have known too little about the social environment in which the individuals under their tuition are being prepared to live. Especially in our departments of science, mathematics, industrial and applied arts and commerce, must we have men and women who can not only presume to teach the theoretical side of these subjects, but who are sufficiently scientific and practical in these respective lines to even take their places in the industrial, scientific, technical or commercial world, and there perform, in an acceptable manner, the work for which they are presuming to prepare workers. The instructors of the above-named departments, in our judgment, are far better teachers to-day as a result of the experience which they have had in conducting courses for these various classes of persons.

No instructor can teach machine shop, train machinists, unless he himself is a real machinist; no man can teach carpentry unless he is a real carpenter, or capable of taking his place in the trade; no man can be the most highly desirable teacher in physical science unless he can make a practical application of this great subject to the world's problems where this science is required; no man can teach pattern making, foundry and forge unless he is a real pattern maker, foundryman or blacksmith—and he can't be these very long unless he keeps in touch with the trade by actual experience. All the technical and mechanical services being carried on by this institution enable these faculty members to put to practical use the things of which they claim to be efficient teachers, and to keep in touch with movements in these respective fields of activity.

The department of education has devoted a great deal of time to rural school problems. During the past year it has had under its supervision and direction two rural schools in easy reach of the institution. It has carried on investigations within the model training school, supervised the practice teaching here at the institution, carried on extension classes, and is making an extensive and intensive study of the rural problems of Kansas.

NEEDS OF THE INSTITUTION.

When we begin to think of and enumerate the actually imperative needs of this institution, in the face of the provisions we may reasonably expect from the legislature, we are appalled. While I doubt if any state has done more for a teachers' college in the same number of years than Kansas has done for the State Manual Training Normal School, yet the growth of the institution has been so rapid, the extent of its influence so great, and the opportunity and demands of the state upon it for service so great, as to render it practically impossible for the state to understand the greatness of its needs. The total enrollment for last year was 3,463. Of this number 1,007 were enrolled in extension and correspondence study. The majority of them were resident students during the summer session, so that throughout the year the institution accommodated approximately 3,463 different individuals as resident students, which also includes 617 enrolled in evening classes. Thus far this year our enrollment is 2,534, and includes only the actual resident students. We shall add to this number approximately 800 in correspondence and extension and 1,000 in evening classes within the next few days. The mid-year and spring enrollments will add approximately 325, making an approximate total for the year of 4,659.

Now, with such an enrollment, this institution has no gymnasium worthy the name. A floor forty-nine feet square is used for both men and women. An improvised basket-ball floor has been provided in the temporary auditorium—a poor makeshift at that. All men engaged in athletics have been compelled, instead of having showers for that purpose, to do their bathing with sponges from washtubs, and have had only a shed in which to dress and bathe, not as good as many barns in Kansas. There are now about 500 men in daily attendance at the institution with no gymnasium or place to carry on physical education work when the weather does not permit them to take such exercise out of doors. Does the institution need a modest gymnasium? The good state of Kansas is soon going to answer this question as it should be answered, and $75,000 to $80,000 would answer this need.

Our daily enrollment is approximately 1,200, which, conservatively estimated, will bring the enrollment for the current year to 4,659. Has the institution any library? None except an improvised one in one end of the Administration building, with about one-fourth of the actual needed floor space. Certainly a separate building, of modern arrangement, equipment and facilities for real library work, is one of the imperative needs. Such a building would cost not to exceed $50,000, and certainly no institution with the annual enrollment of this one can afford, for this amount of money, to be without such a necessity.

The Model Training School, admittedly one of the indispensable parts of every teacher-training college, is now housed in five rather small college classrooms—rooms never intended as quarters for a training school —in addition to these one large room in the Industrial Arts building, where the noise and confusion of the shops make it almost impossible to carry on the work satisfactorily. These are the quarters of the Model Training School, and while the work being done is splendid, nothing like justice can be done to the practice teaching in this institution under such conditions. It is impossible for a training school to be what it should be—the real laboratory for the working out of the problems of the department of education, and other departments, for that matter—under such conditions.

Including the director of music, there are six regular instructors in this department. The department is so large and so popular as to be self-supporting, with the exceptions of the salary of the director, and one other instructor, who gives all of her time to the practice teaching in the Training School. Approximately 150 students are taking special lessons in the music department. In addition to these, some 150 to 200 more are constantly taking the work in public-school music, music supervision, etc. This big department has no place in which to carry on its work, except the fourth floor of the Administration building, and on the same floor where classes in biology, commerce and public speaking are being conducted. A separate building is greatly needed for this department, and could be provided at a cost not to exceed $50,000.

Five years ago a board structure was hastily thrown together as a place in which to house, just temporarily, a cafeteria or dining hall. We were given permission to operate this café independently; that is, without any obligation on the state. It has been operated under the administrative management of the institution for five years. All help has been paid out of the receipts, something like $2,000 worth of equipment has been paid for out of the small margin of profit, and the temporary structure enlarged from time to time, until at the opening of the present year we had a seating capacity of 300. The gross receipts from the cafeteria for the past three years has averaged about $12,000 per year. In summertime it is so hot as to be almost unbearable, and so cold in winter, in spite of all we can do, heating it with stoves, as to be almost unusable. Now I do not know how we are to continue to feed the students of this institution, and do it as we should, unless we may have a modest building in which to house this vital and important service to our students. We have been able for the past five years to save our students, individually, something like $1 per week for board, and give them better food and better service than they could get elsewhere at the increased price. We can continue to do so if the state will provide reasonable quarters and facilities for carrying on the service. It will require $15,000 to $20,000 to do the job. Let's ask the good state for the appropriation. Our young people have certainly lived long enough in these inadequate and unwholesome quarters to be entitled to something better.

This year nine members of the faculty of this institution have been taken from us by universities, simply because these institutions were able to offer four to six hundred dollars more for the same service than it is possible to pay at this institution. It is discouraging, to say the least, when a Board of Administration, president and heads of departments have spent time and effort to secure competent people to make up a faculty, to see, year after year, some of the best ones taken by other institutions, when a few dollars would retain their services for the state of

Kansas. If there is any reason why a university, agricultural college or any educational institution should pay its instructors a larger salary for the same work than the teacher college, we fail to see it. Certainly no more responsible and no more difficult and exacting service should be required of any instructor than in our teacher colleges.

If we are to protect this institution against a continued repetition of the onslaught made on us last year by other institutions we must have a considerably increased appropriation for salaries for faculty.

The following is a summary of the real needs of the institution at the present time. We shall not attempt to state exact amounts of appropriations for these various needs. Within a short time we shall present for your consideration definite and specific amounts needed.

SUMMARY.

1. Increased appropriation for keeping the present faculty, and for additional faculty help.
2. Increased appropriation for upkeep of buildings and grounds; this need based on additional buildings, and present inadequate appropriation.
3. Appropriation for completing athletic and recreation field.
4. Increased maintenance appropriation to cover additional classrooms, laboratories and improvements.
5. Special appropriation for completing Carney Hall.
6. Special appropriation for equipping Carney Hall.
7. Special appropriation for grading grounds around Carney Hall, and putting in necessary permanent walks.
8. Special appropriation to reimburse city of Pittsburg for water pipe line for fire protection furnished by the city in 1914.
9. Appropriation for an adequate gymnasium. This need is based on the lack of any gymnasium whatsoever, worthy the name, and the responsibility of doing anything like what should be done in physical education.
10. Appropriation for a library building, necessitated by reasons stated in above report.
11. Appropriation for cafeteria; needs stated in above report.
12. A reasonable appropriation for the carrying on of extension services such as we have described in our report—an imperative need, if the work is to continue.

In the above we are not including a training-school building or a music building, both of which are needed. We shall not ask at this time for all the needs of the institution. In our recommendation to your body for your consideration, as a part of your recommendation to the legislature, we shall include only those things which in our judgment we should expect at this time.

SUMMARY OF ATTENDANCE.

For the School Year 1915-'16.

From	Kansas, 74 counties	2,421	From	Minnesota	1
"	Arkansas	3	"	Missouri	43
"	California	1	"	Montana	1
"	Colorado	1	"	Nebraska	3
"	Illinois	1	"	Oklahoma	19
"	Indiana	1	"	Texas	13
"	Iowa	5			
"	Michigan	1		Total	2,514

SUMMARY BY CLASSES.

Graduates from other institutions	10
State Manual Training graduates	16

Normal College Department.

Seniors	76
Juniors	155
Sophomores	315
Freshmen	572
Specials	146

Normal High School Department.

Seniors	81
Juniors	119
Sophomores	90
Freshmen	123
Specials	60

Special Departments.

Rural specials	59
Correspondence	220
Extension	554

Training School.

Kindergarten	44
Model School	193
Total	2,786
Duplicates	301
Total	2,514

SUMMARY OF ATTENDANCE.

For the School Year 1916-'17.

From	Kansas	3,255	From	Nebraska	1
"	Alabama	1	"	Ohio	2
"	Arkansas	12	"	Oklahoma	19
"	California	1	"	South Dakota	1
"	Colorado	4	"	Texas	15
"	Illinois	1	"	Virginia	1
"	Michigan	2			
"	Missouri	118		Total	3,433

SUMMARY BY CLASSES.

Graduates	30

College Department.

Seniors	113
Juniors	171
Sophomores	358
Freshmen	661
Specials	101
	1,512

Department of Music.

Music students	185

Normal High School Department.

Seniors	69
Juniors	105
Sophomores	88
Freshmen	101
Specials	52
	415

Special Department.

Special extension	617
Correspondence extension	1,007
	1,624

Training School.

Model School	241
Kindergarten	36
Total	3,857
Duplicates	502
	3,433

CREDENTIALS ISSUED.

1917-1918.

Degrees	49
Life certificates	207
Special certificates	38
Three-year state certificates	148
One-year state certificates	302
High-school diplomas	32

A comparison of the above statistics will show the growth of this institution during the last three years. Practically the same rate of increase has extended over the past six years, if not over the entire history of the school.

BRIEF STATISTICAL REPORT.

Receipts:

Appropriation No. 1—salaries and wages	$ 77,000.00
Appropriation No. 2—new teachers' salaries	15,645.00
Fees	28,343.35
Total	$120,988.35

Disbursements:

Total paid out	$116,530.11
Balance July 1, 1918	$4,458.24

The balance of $4,458.24 on July 1, 1918, is due to the resignation of several teachers, whose places we were unable to fill during the year, and also to an effort on our part to save a little throughout that year for what we knew to be the absolutely necessary increases demanded the second year of the biennium. It will not be possible to show any balance this year, notwithstanding the limited faculty we have, and we will be fortunate if the close of the biennium finds us without a deficit.

We deem it not inappropriate at this time and in this connection to express our appreciation of the helpful and efficient coöperation of the State Board of Administration. As the present plan of control of our state institutions was rather a novel idea, or new adventure, two years ago, naturally there were some expressions of doubt as to the wisdom of the plan, and like all new movements, and their successful promulgation, much depends on the personnel of the Board. In this respect we are doubtful if a wiser selection could have been made.

Personally, and in behalf of our faculty, we feel, in its relationship to the institutions, its policies have been highly satisfactory; its genial, encouraging attitude at all times has been a matter of inspiration to us all; in its leadership we have had the utmost confidence.

One of the highly gratifying things to the management of this institution has been the efficient and profitable services rendered us by the business manager, Mr. Kimball, and his office. For this institution alone he has saved the state of Kansas already this biennium twice his annual salary. In the close supervision of the business side of the institution, and in the effecting of this saving there has never been a single instance of embarrassment to the management. Quite the contrary, the attitude has been an attitude of helpfulness at all times. In general, with what minor modifications time and experience may prove necessary, we believe our state has one of the best plans of state control of her institutions, and we sincerely hope the same plan, with only such necessary modifications as time and experience seem to demand, will be continued.

We take pleasure in submitting herewith brief reports from the various departments. Respectfully submitted.

W. A. Brandenburg, *President.*

INDUSTRIAL AND APPLIED ARTS.

To the President, State Manual Training Normal:

War has perhaps exacted its largest toll from the Industrial Arts Department, as it is made up chiefly of young men. Notwithstanding the large loss from this cause, the enrollment has gratifyingly kept up. A number of older men have been attracted to the industrial arts field because of the great shortage of teachers therein. These men have done very satisfactory work, and reports from the field are such as to encourage others similarly situated to take up this work.

In the more strictly handcraft courses, as basketry, clay modeling, pottery, bookbinding, etc., large numbers, chiefly women, have secured a knowledge of and attained skill in a large media which is usable and very practical in any system of schools. In these practical arts courses about 200 teachers were served in evening extension classes in several of the cities and towns of southeast Kansas.

There were begun this year our first efforts at part-time extension. The Kansas City Southern Railway Company fitted up a room in their shops, and we furnished the instructor to classes in drafting, made up chiefly from machinists' and boilermakers' apprentices. The advantages accruing were so apparent to the company, and the resulting relations established were so favorable to the school, that arrangements have been made for a continuance of this work.

Another phase of work, the results of which have been most gratifying, is that which has been done in the evening.

Courses in automobile instruction attracted large numbers. The outlook for a large department in automobile engineering is very promising. With added shop facilities this should be a department enrolling, in both day and evening, a very large number of men.

Our machine shop also took care of twenty-five or thirty men in the evening courses. The demands of the evening school made it apparent to all that additional equipment must be secured to take care of the increasing number of workers in this community who through the evening school work endeavor to make themselves more efficient day workers.

Having a faculty every man of whom qualified under the Smith-Hughes act, we were able to participate in the funds made available the first year under this act.

The success of the part-time and evening industrial work has led to the planning and adoption of extensive trade courses for both day and evening to meet the increasing demand for such work.

There seems to be a need for additional courses, as sheet metal, plumbing and pipe fitting, concrete, etc.; but before extensive work in these courses can be attempted considerable expenditure is necessary for equipment.

The department is alert and looking ahead to the successful ending of the war, when hundreds of young men, fresh from successful battle fields, enthused and imbued with the idea of doing great things, will be looking to this department as the one where they can get that training which will make us ever a prepared nation.

We are asking for that recognition which will enable us with added equipment and facilities to do the very utmost that will be expected from these returned heroes. Respectfully submitted.

A. H. Whitesitt.

DEAN FOR WOMEN.

To the President, State Manual Training Normal:

No woman could ever ask for more loyal support than has been mine from faculty wives and lady members of the faculty. The problems which of necessity arise in the administration and adjustment of academic and social life among 2,400 girls have not all been speedily nor easily met, but the year passed without a hint of discipline.

Perplexities have arisen which called for a readjustment in activity and ambition, but each girl has been given courteous consideration and in her own time has gladly met the challenge to make herself the woman she wants to be.

It is not our policy to exploit such cases. In fact, conferences bordering on discipline or reproof never occur in the dean's office. Remembrance of such an hour might prove a barrier to happy, helpful fellowship at the same desk later on.

Our girls have made true their slogan, "We'll not break faith with our ideals." The dean's office has been open, with a capable, efficient secretary at the desk every school hour of the year. A sick call at midnight has been counted as much a privilege to serve as a call at the desk, and the happy comradeship that enters into the activity among our girls has put a queenliness of womanhood into many a girl's life which will never be lost. The office is the rendezvous for any group of girls who meet in schoolgirl conference or for a social hour.

As chairman of the social committee I had help from every organization of the school. Our social life has been of the healthy democratic type which sends students out not snobbish nor boorish, but capable of giving the glad hand in a helpful way whether at school or church or on the street.

As teacher of methods, I find there were 535 enrollments in my classes during 1917, and I have been able to accept invitations to address the teachers in county meetings on topics related to my department.

The rooming proposition is handled without friction by the "Rooming Committee," and the landlady who does not take a sane attitude in meeting personal problems is the exception.

The first week of each semester a church membership directory is compiled, and through the assistance of the various pastors every girl is made welcome to the church of her preference.

The Y. W. C. A. cabinet has headquarters in the dean's office, and in addition to the weekly Y. W. C. A. service, it has stood back of every activity among the girls, from a camp breakfast to a successful drive for war fund.

I would not be worthy the favors shown me at every call for coöperation if I did not mention the efficient and thoughtful consideration shown me by our janitor service. Often my office is used twice a day for a bevy of girls whose meeting calls for extra chairs and service. This extra service has been given unstintedly and ungrudgingly.

Respectfully, MRS. HATTIE MOORE MITCHELL,
Dean for Women.

BIOLOGY.

To the President, State Manual Training Normal:

It has been the endeavor of the department of biology during the past two years to relate its work as closely as possible to the larger interests of the people of the state and the nation to-day. Food production and conservation, health problems and the biological waste in civic life have received much attention. In one city a biological survey and the resulting elimination of biological waste saved the people of that community, according to a conservative estimate, over $10,000. It has been possible also to so relate biology and sociology and present-day social problems that it finds a large demand among the students in this field and in the field of education. In fact, one of the courses most often called for in extension has been social biology. A course in which, among other things, the relation of biology to human warfare has been discussed.

There is ever a larger number of premedic students taking biology in this institution, and it seems that if the department is to continue to serve these students a regular course should be outlined for them. These students come from this community largely, and should be served. The extension work of the department has been limited on account of lack of faculty. Many more calls came to the department than could be served. I call attention especially to one class served in Kansas City, Kan. There were ninety in this class, and besides serving this one extension group, the instructor had classes in two other cities and carried his regular work in the institution.

The war and other institutions have drawn from the faculty of this department three members in the last two years. Mr. Donaghy was called away early to the medical department of the United States army and is now in the medical school of Yale University. Mr. Sigler was offered a position in the University of Illinois, and accepted, but was later called to the army, and is now at Yale with Mr. Donaghy. Professor Ringle, who did the last two years such effective work in nature study, is now in overseas service in the Y. M. C. A., and is soon to take charge of the organization of agricultural education for the United States army men in France. Many of the students of the department have found service in the medical department of the United States army, for which their training in this department especially prepared them.

During the summer session the department has made special effort to bring in talent of national repute. During the past two years the men brought have added materially to the work of the department and to the larger influence of the summer school.

Respectfully submitted. O. P. Dellinger,
Head of Department of Biology.

HOME ECONOMICS DEPARTMENT.

To the President, State Manual Training Normal:

The present world struggle has brought about vital changes in the homes and home life of the American people. If home economics is to justify its existence it must be able to meet such changed conditions and render real aid in the readjustment necessary. Not only this, but through the coöperation and earnest efforts in teaching and directing the conservation of food and clothing and other materials we may contribute directly to the success of the armies abroad. Having these facts in mind, the home economics department has considered the situation and attempted in every way to coöperate and be of service

In the summer of 1917 some especially practical work was given in the form of unit courses. Among these were meat substitutes, war breads, war-time desserts and pastries, fat and sugar substitutes, war-time menu making, child conservation, marketing, storage and waste problems, Red Cross dietetics, first aid, social workers' outfit, and surgical dressings.

At the same time a vocational course for cooks was offered and a practical course in dietetics for both men and women. Canning and preserving courses have been given both to students and others whenever there has been the call.

Ever since the need has arisen for Red Cross garment making certain of our clothing courses have been given over partly to this. Since December, 1917, more than seven hundred articles have been made, a large percentage of which have been hospital shirts, convalescent robes, operating suits and pajama suits. In addition to this 109 knitted pieces have been made. A Red Cross auxiliary has been organized among the students, and work is encouraged and supervised by one of the domestic art instructors.

During the summer of 1917 a junior Red Cross lawn fête was given by the domestic art section, assisted by the domestic science section and the departments of music and physical education. The sum cleared was $225.

The domestic art department has made two service flags for the school and S. M. T. N. pennants for batteries C and D, which were stationed on the campus.

A course in renovation, remodeling of garments and patriotic buying has proved very valuable. It has been given to students, to home makers, and to precinct workers—the latter in connection with the work of the local emergency home demonstration agent.

With the large number of new opportunities, we have not neglected our chief work—that of training teachers of home economics, and our course of study has been enlarged and strengthened.

Among the new projects is a practice house for advanced students. This is to serve as the laboratory for household management problems. We have been very fortunate in being able to have the use of a real home for this purpose. An instructor and a small group of students live in the house, and the owner of the house and her three children make part of the group. This is more practical than the usual practice-house idea, in that our students are working in an established house and with a group which more nearly resembles the typical family.

New courses about to be established are institutional cookery and management. Our school cafeteria is now well equipped and under the management of the department, and will be made the laboratory for the new courses.

The feeding of the S. A. T. C. in our school is under the direction of the department, and a special effort is made to give these students food which is the best suited to their needs.

When the new building is completed we will be able to expand the work of the department in a way which has hitherto been impossible.

Respectfully submitted. ZOE WOLCOTT,
Acting Head of Department.

GEOGRAPHY.

To the President, State Manual Training Normal:

It has been said that the present generation has learned more geography in the last four years than in all the preceding decades. The newspapers have been studying and teaching geography as never before. Geography has not jumped suddenly into importance, but its importance has suddenly come into its own.

The geography department of S. M. T. N., in order to justify its existence, has a twofold purpose in view: First, the training of teachers; second, to put the student in touch with existing geographical conditions and current geographical problems of national and international import. Teachers are taught to teach humanity rather than locality; relations rather than facts; science rather than subject matter. Throughout all the courses geographical environment as the key to human endeavor is the constant theme, thus laws, tendencies and motives are understood, right efforts are appreciated, and human weaknesses viewed with mercy.

To meet the needs peculiar to the present time, emphasis is laid on geographical conditions leading to war and the conduct of war as influenced by climate, topography, location of resources, and transportation facilities. Particular attention is given the topography, climate and resources of the invaded territory. Especial courses have been organized for the teaching of military map-making, topography and meteorology. During the past biennium the enrollment in the department has increased 76 percent, and the requests for extension work have been greater than the present faculty could supply.

Respectfully submitted. EULALIA ROSEBERRY,
Head of Department.

DEPARTMENT OF EDUCATION.

To President W. A. Brandenburg:

DEAR SIR—In compliance with your request, I have the honor to submit the following report concerning the work of the department of education for the current biennium. Since my last report one additional member has been added, in the person of Prof. Edgar Mendenhall. This additional help has enabled us to extend the usefulness of the department and to organize a special course for the training of rural teachers. The constantly increasing number of teachers enrolling in this course indicates the growing demand in rural communities for teachers specially prepared for this kind of service. The past year we have cooperated with the county superintendent, the board of education and the teacher of a one-room school near the institution in the development of an efficient rural school that might be used as a training school for the prospective rural teachers in training. The department would very much like to increase this opportunity for training by organizing a two- and three- teacher school under the direction of the department for this purpose. In order to make this work efficient it would be advisable for the institution to have a voice in the selection of the teachers for these schools, and possibly pay a fraction of their salary, in order to guarantee teachers prepared for this special work. I feel sure satisfactory arrangements could be made with school officers to this end.

I desire again to call your attention to the inadequate quarters of the Training School. We have been unable to organize the Junior High School on a satisfactory working basis for this reason. We are looking forward to the completion of the new building in the hope that we will have vacated rooms for this purpose. In this connection, however, I wish to suggest that the Training School can never do its best work for training teachers in a building not constructed for this special purpose; neither can it be done economically. The present arrangement of having children of the elementary, high-school and college grades in the same building is neither just to the children nor fair to the older students. I wish to suggest in this connection an arrangement that in my judgment would be mutually advantageous to the city of Pittsburg and to the Normal School.

The population of Pittsburg in the vicinity of the Normal is rapidly increasing, and in a short time it will be necessary for the city to provide more school facilities in the vicinity. Were it not for the children cared for in the Normal the demand would be imperative at the present time. My suggestion is that the city erect a building near the Normal that the Normal may use as a training school; that the Normal furnish the teachers and the equipment and care for the building; that the school be opened to all the children in the vicinity of the Normal, but attendance not compulsory; that the control and administration of the school be under direction of the institution as at present. Other details could be worked out satisfactorily, as is the case in most cities where a normal school is located.

The extension and correspondence work begun a few years ago has grown in extent and popularity. In several adjoining counties the department has helped organize and conduct the professional reading of the rural teachers the past two years. This service has been appreciated both by the superintendents and the teachers. During the year ending June 30 the department gave instruction to more than 500 students off the campus.

The past two years we have lost two or three teachers from the Training School, but have been fortunate in securing efficient workers in their place. At the present time we have a very strong faculty in this department. I fear, however, this standard cannot be maintained unless more compensation is assured for this service.

In closing I desire to express my appreciation of the earnest and hearty coöperation of all members of the department, and also other departments of the school that have contributed greatly to the success of the professional department of the institution.

Respectfully submitted. D. M. Bowen.

MATHEMATICS.

To the President, State Manual Training Normal:

The scope of this department has been extended to include considerable work of an industrial character in civil and mechanical engineering. The bill passed by the 1917 legislature requiring hoisting engineers to possess a certificate of competency made an unusual demand for instruction in the elements of steam engineering. Many of the older men who received service certificates also wished to secure additional training. As a result of this demand for instruction, classes were organized at Pittsburg, and also at Scammon and Arma, in stationary engineering. As many of these men were deficient in mathematics, it was found necessary to organize special classes in industrial mathematics.

The combined enrollment in the classes in stationary engineering and mathematics was almost 100. Since many of these men work on night shifts, it will eventually be necessary to organize day as well as evening classes.

Two-year courses in industrial civil engineering and industrial mechanical engineering were organized in the spring of 1918 and put into operation at the opening of the fall term. The major work in these courses is being developed by the instructors of the mathematics department.

This work is being done in addition to all the regular courses for teachers of mathematics, and those courses given as allied subjects to teachers of industrial arts, home economics, and grade teachers. There will be no decrease in the activity of the department in the field of teacher training, and the residence and extension work of this character is larger than in former years. However, as all of these lines develop, extra teachers must be provided, and also considerable equipment to meet the needs of the laboratory instruction which must accompany that of the classroom. Respectfully submitted.

J. A. G. SHIRK, *Head of Department.*

HISTORY.

To the President, State Manual Training Normal:

The department of history and social sciences had the largest enrollment last year in its history, about one-third of the entire student body taking work in this department. It has always been the aim of the department to present such practical courses in history, sociology and economics as can be used by the teacher in his work. We have had during the past year five instructors, overworked in trying to meet the demands made for work in this department.

In addition to the residence work, we have given courses in every town of any considerable size in southeastern Kansas, having in some of these extension classes as many as 106 teachers. The demands this year for this extension work are far greater than the teaching force of the department can possibly meet.

Many new courses are being organized and worked out to take the place of some of the more stereotyped courses in history and economics, in order that we may give a more intelligent understanding of the political, social and economic principles underlying this, the greatest of all struggles in human history, and prepare our students for the rebuilding of the world upon principles of justice and humanity.

During the past year the department suffered the loss of two very able and enthusiastic instructors, both of whom are in the service of our country—one a first lieutenant, who has been seriously wounded on the battle front in France, and another who is rendering service in this country. We have been fortunate, however, in securing the services of other instructors who are willing and able to take up the load which they laid down, and help push the work of the department to a successful conclusion. Respectfully submitted.

G. W. TROUT, *Head of Department.*

COMMERCIAL DEPARTMENT.

To the President, State Manual Training Normal:

This department at present is offering a two-year college course, leading to a life diploma in commerce, particularly for the preparation of commercial teachers. By means of this course we have been able to send to the high schools of Kansas, and other states as well, better-trained teachers.

We also offer a business course for office training. Through this course we have been of great service by preparing students for civil service and general office work.

Last winter the department offered night courses, which were so largely attended that all who made application could not be admitted.

The service of the department is very much handicapped by lack of adequate equipment and sufficient room. Not all who make application for the work can be admitted.

A large amount of work is done for the faculty by the students of the department. Respectfully submitted.

E. F. SHOLTZ, *Head of Department.*

DEPARTMENT OF FOREIGN LANGUAGES.

To the President, State Manual Training Normal:

The department of foreign languages notes a further growth, numbering in all 191 students, in the fall of 1918. The nature of the work has, however, rapidly and radically changed. As late as the summer of 1916 the emphasis of the work of the department was on German; during 1917-'18 on Spanish; during the present year overwhelmingly on French, there being over 150 students in that one language. No German is now being taught. Because of the changing choice of students it has been impossible to meet the demands for teachers. In 1917-'18 we had twelve calls, mainly for Spanish and Latin, but were able to fill only four.

The instruction force has been practically constant during the two years, consisting of the head of the department, Mr. Ernest Bennett (during his absence in army Y. M. C. A. work, Mr. Kenneth Kaufman, of Oklahoma City), and two practice teachers for Junior High School Latin.

The department needs may be grouped under two heads—instruction force and equipment. We need a teacher for Junior and Senior High School Latin and French, the work being seriously handicapped at present. We also urgently need maps, charts, books and objects for instruction, the need being especially acute because of the rapid change in emphasis on different portions of our work.

Respectfully submitted. SAMUEL J. PEASE,
Head of Department.

DEPARTMENT OF DRAWING AND DESIGN.

To the President, State Manual Training Normal:

This department has continued to send to the public schools of the state many teachers prepared to instruct their pupils in drawing and handwork, having a close relation to the life and activities of the home, and though there are very few supervisors of drawing in this state there are several from this school in the field. In its relation to the other departments of this school the work is correlated as closely as is possible to make drawing and design of service rather than a department standing apart from life activities.

Because of the tense conditions caused by the war, every effort has been made to reduce expenditures, and pupils are now required to purchase their own materials, and they seem much better prepered to do this than in years past. The real handicap is lack of lockers and settled quarters. Because of shortage of help this department is not able to reach its highest possible state of efficiency, especially in correspondence work—a rapidly growing field that gives promise of reaching much development in offering service to teachers.

The greatest needs of this department are more settled quarters, room equipment, and more definite conditions of work—hardly possible before the conclusion of peace. Respectfully submitted.

LYLE BROWER, *Head of Department.*

DEPARTMENT OF CHEMICAL AND PHYSICAL SCIENCES.

To the President, State Manual Training Normal:

The department, in addition to caring for its own field of work, is carrying on some courses related to other departments and subjects. Food chemistry and the chemistry of textiles are courses carried on in connection with the household arts department, and industrial physics supplements the industrial arts department.

The aim of the department is to prepare teachers for these subjects who will be capable of connecting the theory involved in the subject and the lessons learned therein with the practical affairs of daily life, and in the different vocations where a thorough knowledge of the science involved will make the worker more efficient; also to help those who teach in our elementary schools to understand and appreciate their physical environment.

The laboratories of the department are open on Saturdays, and during the past year courses have been given in beginning chemistry, chemical analysis, organic chemistry, geology, household physics, and electric wiring. Correspondence and extension work has been given in such courses as can be carried without the extended use of well-equipped laboratory.

The department has rendered efficient service to the institution through the class in electricity by installing the electrical apparatus used in other departments and around the buildings and by keeping the same in repair. The class in plumbing is likewise looking after the plumbing. The chemistry classes have made liquid soap used in the laboratories, and taught the janitors how to prepare their scrubbing compounds; have also dyed the jute and raffia used in the home economics department, and have made chemical analyses for many citizens of our state of samples of coal, water, milk, etc.

In 1910 the department commenced to give practical instruction to miners along the lines of mine gases, mine ventilation and explosives. This work was continued for three years, and only stopped when the state established the School of Mines at Weir, Kan. Last year this work was resumed on a much wider and more intensive scale. During the year courses of instruction were given to 176 miners; to 27 firemen and engineers in fuel conservation; to 33 electricians; to 32 garage men and others interested in the electrical side of the automobile; to 70 students in telegraphy, in which both radio and Morse systems were taught. The demand on the department for all these lines of work is strong, as well as for extended courses of instruction in applied science. The department is in sore need of greatly increased equipment, and also an instruction staff to meet the urgent demand which is made upon it.

Respectfully submitted. J. A. YATES,
Head of Department.

MUSIC.

To the President, State Manual Training Normal:

Perhaps no department has enjoyed greater progress and efficiency than has the music department. The faculty of the music department is the best the institution can employ, and each one is a specialist in some line of instruction.

The head of the department not only has charge of organizing the entire music work of the institution, but directs the policies of the work in each division. He has organized a large community chorus of 1,000 voices, which gives at least one concert a year in the city park, accompanied by the municipal band of thirty pieces under his direction. He has also organized community groups in Girard and Columbus, which take part in the annual festival of the institution.

The piano, voice and violin departments now offer degrees, and each is in charge of an artist.

The course in public-school music offers great advantages, because it is under the direction of those who have had practical experience as supervisors.

Not only is the technic of voice, violin and piano brought out to its highest degree, but also the development of music, by laying more stress upon harmony, counterpoint, musical formation and orchestration, under the direction of those who have had years of experience.

It would be hard to justify the splendid work of this department in such a brief report. Respectfully submitted.

Walter McCray, *Head of Department.*

THE ENGLISH DEPARTMENT.

To the President, State Manual Training Normal:

The English department enrolled a large number of students during the school year of 1917-'18. Three teachers were in charge of the work, and there was "no time for play" for any one of the three, who not only took care of the residence work, but throughout the year carried large correspondence classes. In addition to this, extension classes were conducted at Independence, La Cygne, Columbus, Olathe and other Kansas towns.

It was the constant aim of the department to correlate with the World War, the greatest event in all history. We tried to make each day contribute something toward winning the war. The latest war news was brought daily to the classes, maps of the battle front were often shown and explained, the pupils themselves often giving short talks on the progress of our government in its various branches of preparation. In every class the fine war literature of this country and of England was used as models of effective style. The methods, the spirit, the characteristics of great generals were made the subject of special study.

In the summer school a special course was offered in war literature, the finest specimens of both prose and poetry being presented for study. This course proved highly entertaining and instructive, according to the testimony of those who took it.

We tried to impress the pupils with this truth: That while "the boys" are carrying on the war "over there," the major part of it must be carried on "over here"; that each of them was a soldier of the reserve corps, fighting on "the inner line of defense," and that if they failed to support those "at the front" they were slackers in the fight to save democracy to the world, and to keep America American. Our great aim was to help the pupil realize that to live in these great times and have a part in freedom's crowning hour is a priceless dower.

Respectfully submitted. Ermine Owen,
Head of Department.

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THIRD BIENNIAL REPORT

OF THE

FORT HAYS KANSAS NORMAL SCHOOL

FORT HAYS, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Governor.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

RESIDENT OFFICER:

W. A. LEWIS............................ President.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1918
7-4941

REPORT OF THE PRESIDENT.

To the State Board of Administration, Topeka, Kan.:

GENTLEMEN—In presenting my third biennial report as president of the Fort Hays Kansas Normal School, I am pleased to inform you that the school has maintained a consistent record of service and attendance.

The enrollment for the year 1916-1917 was 836, and for the year 1917-1918 was 977 individual students. This enrollment does not include our Training School.

The Normal School and the Hays City School entered into an agreement in 1914 whereby the Normal School was to take over the professional guidance of the Hays City public schools. This relation has lasted four years. The total enrollment of the Training School for the year closing June, 1918, was 447 pupils.

The Normal School spent in salaries for the year 1916-1917, $52,944.61, and in 1917-1918, $57,773.72. Special appropriations for Sheridan Coliseum in 1916-1917 were $4,401.89, and in 1917-1918, $22,639.06. The running expenses for 1916-1917 were $18,006.27, and in 1917-1918, $19,318.89. Money spent for laboratory and class supplies for 1916-1917 was $4,072.13, and for 1917-1918 was $7,543.08. In 1916-1917 the Sheridan Coliseum was completed as it stands to-day.

There have been no appropriations or expenditures for improvements on the old buildings. From year to year we have repaired those things which we could not avoid repairing and have been forced to allow everything else to do just as they are.

During the biennium July 1, 1916, to June 30, 1918, this school has carried on a rural school betterment campaign through its Department of Rural Education. The two professors in the Department of Rural Education were at the service of the county superintendents and the rural school teachers throughout western Kansas. They attended county teachers' meetings and institutes. They traveled over the country with the superintendents from schoolhouse to schoolhouse, giving actual schoolroom work. At night they held meetings with rural school boards, discussing the problems of school support, hygiene and organization. The reports that have come to us through county superintendents show that in many places these services have revolutionized the relation towards and the interest of the local community in its rural school. These two workers have been the direct means of securing the coöperation of school districts in building new, modern and approved planned schools for the children in the rural districts. We rank this service as one of our vital agencies in the work which we are doing in western Kansas.

Our correspondence work has maintained a consistent record. We have carried on this work without expense to the state for additional faculty help. No faculty member has received a penny for his service, which sometimes amounts to nearly as much as their class work; neither have they been allowed to count their correspondence service as part of their daily faculty services.

The faculty has given freely of its services in institutes and public gatherings of various kinds and have furnished at week ends from two to four of its members without cost, other than their traveling expenses, to the counties or towns desiring their services.

I wish to say in this connection that it has been the sentiment of this faculty that the state is paying them a regular salary, and it is their duty to give six days of service per week to the state, and they have at no time asked that they be paid extra for the correspondence work which they are doing or the general public service which they are giving throughout western Kansas.

The institution has continued to strengthen its ideals in scholarship. The personnel of the faculty is a guarantee of scholarship of this institution. The members of this faculty have studied in fourteen different universities in America and Europe. We have represented in our faculty graduates of ten of the best state normal schools in America. Members of this faculty have graduated from six different state agricultural colleges and seven old-line colleges. Seven schools of fine arts also contribute their broadening influences at the council table of our faculty meetings.

It has been my policy as president of the institution to bring in the faculty as wide a distribution of scholarship and ideals as possible, in order that we may have contributed the experience and outlook of as many centers of education as possible.

During the biennium just closed, June 30, 1918, this institution graduated 39 students with bachelor of science degree and issued state life certificates to 104 students. In addition to this there were 26 students granted special state certificates, 47 students granted three-year state certificates, and 267 students granted one-year certificates.

The last three internormal oratorical contests have been won by this institution. In debates the institution has carried its consistent record of the past.

Each year the Department of Music has given to the public an oratorio and a grand opera. Each of these performances has been attended by large and appreciative audiences of people of western Kansas. Many of these traveled over one hundred miles in their automobiles to attend.

Pageantry had a large place in the normal school activities and has been an essential part of the year's programs of the school. The oratorios, grand operas and the pageantry give large numbers of our students opportunity to participate in public activities.

I am glad to report that this school maintains a very pleasant relation with the State University in the admission of our students to that institution. Since our agreement entered into in 1916, whereby this Normal School and the University, through joint committee action, agreed on certain requirements and conditions, we have found that our students have had no cause for complaint, and the University has made no complaint to us that we have not lived up faithfully to our agreements at that time. I mention this because it has had a decided influence in persuading our boys and girls to continue their graduate studies in the state of Kansas rather than carry on this study in some other state.

One of the best evidences that we have of the esteem which the Normal School has won for itself in western Kansas is the fact that high school principals and their superintendents, men and women of maturity, are resigning their paying positions to further equip themselves by studying here.

The percentage of high school graduates attending our school is also increasing. This is due to two causes. First, the increased number of high schools and high-school students in western Kansas; and second, the respect we are winning in the high schools of western Kansas for the scholarship and the faculty which we are maintaining at this institution. Many towns and counties which heretofore have sent their high-school graduates to other institutions are now giving us the lion's share of their graduates.

This Normal School has attempted to keep abreast of the times in regard to food production and war work. We started out with the question of food production through our irrigated gardens. We began with ten acres, and have increased our acreage until we are now cultivating fifty-five acres under irrigation.

We were continually increasing our number of students who were making their own way through school when war came. This Normal School out of its student body of the last biennium contributed 156 young men. Nine of the students of this school who entered the service of the government within a few days after the declaration of war had the honor of landing with the first contingent of American soldiers that landed on French soil, and with the exception of one who was killed in battle, they have served on active duty from that day to this. Every one of these nine boys was making his own way through school in our gardens or the dairy.

In the Friendship Fund Campaign the students of this institution contributed $1,640. They have been active workers in the Red Cross service. Many of our girls are now engaged in hospital and war work and have accepted service until the close of the war.

The Normal School faculty has to its credit eight members in the service of the government—five men in the army and three women in Red Cross and hospital service. Ever since war has been declared and the government pointed out ways in which institutions might be of service, this institution has been a consistent worker and enthusiastic in its efforts to fulfill its duty and carry out the necessary work of the government.

In setting forth the foregoing facts I am not unmindful that we have been greatly handicapped in our work by lack of funds. We need money and equipment. I might call your attention to the fact that we have had no money to purchase library books for the last two years, except a very few classroom books. We are a vocational school and we cannot conduct our work out of textbooks.

We have lost many members of our faculty because other institutions could pay them higher salaries, and unless we can meet this situation we can't hope to maintain a faculty of the standard of which we have had in the past. This is the most serious situation which we face. Other states and other schools are offering more money for high-class men and women than we are able to pay and they are taking our faculty.

Another place where this institution should be strengthened is in its professional division. The heart of a normal school should be its professional atmosphere, and the professional department should be as rich as it is possible to make it. If we are to really contribute our full measure of professional service to western Kansas we must have larger funds to devote to our training school. At the present time the city of Hays is furnishing the money that is paying all the expenses. It is not right to expect a town in which a state school is located to bear the state's expenses. We should have funds to meet the requirements of the salaries which are necessary in the employment of a higher trained faculty for our Training School than that which Hays could afford to support. I earnestly recommend that we meet this situation this year and strengthen this vital department of our institution.

I recommend that the Board call the legislature's attention to the fact that this institution has been running on a basis of mere existence. The question has ever been with us, Have we the money to do this or do that? Very seldom can we decide a question on the policy of the greatest good for western Kansas.

I wish you to understand that the faculty of this institution is not complaining, and that I am not stating these things in the attitude of faultfinding. I am simply stating a condition in which we find ourselves.

Our old buildings are badly in need of repairs, and if we are going to keep up with the requirements of this day and age we must increase our equipment and instructional force. We cannot expect to be attractive to young men and women of western Kansas if we can't offer them good tools and good machinery by which they can prepare themselves for the big battle of business and life that is before them.

I am making this plea in their behalf—not ours. We are merely instruments. The young men and young women are the future of western Kansas, and the equipment and the quality of the Normal School must be the instrument that will have a large share in forming the future of western Kansas. This institution has never known what it was to have sufficient funds. This institution has never known what it was to be thoroughly equipped.

The question that we are asking ourselves every day is, How long will it be before it is recognized that the boys and girls of western Kansas are entitled to the equivalent of those of any other part of this great state?

Very respectfully submitted.

W. A. LEWIS,

President, Fort Hays Kansas Normal School.

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BIENNIAL REPORT

OF THE

STATE NORMAL SCHOOL

EMPORIA, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Governor.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

RESIDENT OFFICER:

THOMAS W. BUTCHER............................President.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1919
7-5216

REPORT OF THE PRESIDENT.

Board of Administration, Topeka, Kan.:

GENTLEMEN—In accordance with your request, I take pleasure in handing you a report of the work of the Kansas State Normal School for the biennium ending June 30, 1918.

ENROLLMENT.

During the first year of this biennium the enrollment of the School increased from 3,707 to 4,178. During the second year of the biennium the enrollment decreased to 3,732. This reduction was directly attributable to the war. In all of the above enrollments I am including the Training School, which annually enrolls from 250 to 285 children, also from 500 to 600 students taking correspondence-study and extension courses. The Summer School reached its high mark in 1916, when the total enrollment was 2,344. In 1917 the enrollment dropped to 2,071. In 1918 the total enrollment was 2,235. No students taking correspondence-study courses or extension courses are included in the Summer School enrollment.

DEGREES AND CERTIFICATES.

A list of the degrees conferred and certificates issued during the biennium is given at the close of this report. The number of students remaining in School four years and taking the degree bachelor of science in education was rapidly increasing prior to the war. Indeed, during the year closing June 30, 1918, the School conferred more degrees than during any other year in its history. It should always be remembered, however, that the work and influence of the School cannot be measured by the degrees it confers and the certificates it issues. Hundreds of students come to the institution every year who do not remain for degrees or certificates. They leave the institution before completing their courses and go back to the schoolrooms of the state with a larger vision of the work of the teacher. Many of these students will return to the School at some future time for further work, but a large number of them will never receive certificates or degrees. In this connection I desire to call attention to the fact that the chief contribution which this School has always made, and must in all probability always make, is in the preparation of teachers for the primary and elementary schools of the state. We have estimated that fully eighty-five percent of the School's efforts are spent in the preparation of these teachers. I make this latter statement because the School has sometimes been accused of aspiring to become an institution where high-school teachers only are trained. An examination of the work done by the School, together with its plans for the future, will show that this cannot be true. Under the present organization of higher education there is no place outside of the normal schools for the training of the man or the woman who is to take charge of a system of schools in a village or rural community. A principal or a superintendent of a graded school where only a few teachers are employed must know not only high-school work, but work in the grades, including the primary. It is not enough that such a principal have a knowledge of the grades alone or of the high school alone. He must have expert knowledge of methods of instruction in both departments. The Normal Schools in Kansas are organized and equipped to prepare men and women to give instruction and to supervise all grades of public-school work from the kindergarten to the senior high school, inclusive.

The legislature of 1915 limited the life certificate, based upon two years of college work and issued by the Normal Schools, to the grades and the junior and two-year high schools. No mention was made in the law of the three-year state certificate issued by these institutions based upon one year of college work, hence teachers and boards of education have from time to time erroneously assumed that such a certificate is valid for work in accredited high schools. It is to be hoped that the legislature will take such action as to clearly define the limitations of the three-year state certificate.

ACADEMIC STANDARDS.

I am glad to be able to report to the Board that the work of this institution leading to the degree bachelor of science in education is fully accepted by the University of Kansas. The University of Kansas now makes the degree bachelor of science in education, conferred by the Kansas State Normal School, a basis for graduate study in the School of Education at the University. Not only so, but students who complete a part of their work only at this School have their work accepted at face value toward the degree bachelor of science in education at the University of Kansas. The foregoing agreement between the two schools was reached on March 29, 1917, but was not put into effect until September, 1918, for the reason that it would have been unjust to require students to change their courses after they had practically completed the same. The Kansas State Normal School has been for several years a member of the North Central Association of Colleges and Secondary Schools. This means that the members of the faculty of this institution meet fully the academic standards of the North Central Association. I am calling attention to this fact simply because there was a time when the normal schools of the country did not fully meet college standards.

WAR WORK.

Like all institutions of learning throughout the country, the Kansas State Normal School has modified its courses, changed the length of its term, and in other ways adapted the activities of the institution to the emergency created by the entrance of the United States into the war. All of the courses recognized for the academic section of the Students' Army Training Corps are offered at this School. In addition to these academic courses, the School has maintained, since the opening of the war, courses in radio and gas engines. Evening classes have been organized for men in and near Emporia who could not leave their work during the day to attend school. The department of home economics has been organized along lines suggested by the Food Administration. Every girl in the School has had opportunity to take training in the use of substitutes in bread and in other forms of food. All of the girls have been required to attend lectures on food conservation; practically all of them have done Red Cross work. Instead of three days of physical training each week for the girls of the School, we are now requiring two days of physical training and one day of work in the Red Cross room maintained on the campus. Courses have been maintained in Red Cross instruction and in home nursing. While the designation of the School for an S. A. T. C. unit does not come properly under the biennium for which this report is made, it may not be out of place to add at this time the fact that a group of students was sent to Fort Sheridan in July, 1918, for sixty days' intensive training. A majority of these men received commissions and are now engaged in military service. All of the male students in the college department of the institution will be inducted into military service October 1 and will be under regular military discipline while continuing their respective courses in the School. In order to meet the requirements of the S. A. T. C., changes have been made in the daily schedule, and also in the length of the terms in the school year. Hitherto the School has been on a semester basis, with eight and one-half weeks' work for the summer session. Beginning October 1, 1918, the institution will be on a quarter basis.

EXTENSION AND CORRESPONDENCE-STUDY COURSES.

Two important lines of work are receiving special emphasis during the war: correspondence-study and extension courses. Correspondence-study courses are offered in all departments of the School which are able to outline the work in such a way as to enable students to do satisfactory work off the campus. These courses are conducted in accordance with the standards maintained for similar courses by the best universities. Extension courses are maintained at centers in the general region of Emporia. Members of the regular faculty visit these centers once in two weeks and hold recitations two hours in length. Assignments are made and preparation for the work is required of the members of these classes. In other words, these courses are not lecture courses. Students who carry this work successfully for twenty-four weeks receive two hours of credit. The actual time spent in the recitation and in the preparation of the work is the same as if the work were done on the campus. So many young men and women who were attending school are finding it necessary to teach during the period of the war that extension work done by the School is meeting with much favor. Another piece of work which is somewhat distinctive is being done by the Bureau of Educational Measurements and Standards. This School has now become probably the largest distributor of educational tests in the country. It serves not only the schools of Kansas, but schools in states throughout the middle West. With the recognition of the importance of this work by the army officials, it seems certain that measurements of this kind will grow in importance.

SIZE OF FACULTY.

While the attendance in the Summer School has remained practically normal, the attendance during the regular year has decreased thirty-eight percent since our entrance into the war. Without giving the matter serious thought, some people have assumed that a corresponding decrease should be made in the size of the faculty. This is not possible, for the reason that practically as many classes must now be maintained as were necessary when the enrollment was normal. The difference is in the size of the classes, not in the number. Courses in which 30 to 40 students were enrolled before the war now have from 20 to 30 students, but the classes require as much of the instructor's time as formerly. Every proper effort has been made to reduce intelligently the size of the faculty during the war, with the result that we have at this time approximately eighty-five faculty members, librarians, administrative officers and secretaries, as compared with approximately 100 during the first year of the biennium. During the summer session it is necessary to add to the teaching force of the institution materially, due to the marked increase in attendance.

CHANGES IN CAMPUS AND BUILDINGS.

In June, 1917, the Preston B. Plumb Memorial Building was occupied for the first time. This building is 268 feet long, four stories high, contains ninety classrooms and offices and an auditorium with a seating capacity of 2,500. It is located north of the other buildings on the campus except the cafeteria building, and is at the head of Commercial street. It is one of the best school buildings in the West. The administrative offices of the institution are located in this building, but the largest part of it is given over to classrooms. The old administration building has been completely removed, thus changing the center of the campus and its appearance in general. Most of the walks provided for in the new plan have been laid, and the grading of the campus is nearly completed. The basement of the old building has been converted into a sunken garden, drives have been laid out, and other steps have been taken to beautify the campus. During the biennium, as stated above, the foundation of the library was repaired, thus stopping the spreading of the walls, which threatened to become serious. The new cafeteria building, situated on the east line of the state's property immediately north of Thirteenth street, has now been completed and is in operation. The drawing of the plans of this cafeteria building was one of the last pieces of work done by the late Charles H. Chandler, state architect. The building is well arranged and well equipped. The reception room has not yet been completed, and no attempt has been made to furnish it. The second story is occupied by the department of home economics. The outer walls of the building present an unsightly appearance and should be stuccoed as contemplated by Mr. Chandler. It is hoped that funds will be available for this purpose, and also for the erection of a large porch to run across the front of the building. A suggestion for these important items appears under another head in this report.

SALARIES.

I am sure that it is not necessary to call the attention of the Board and the public in general to the unfortunate condition prevailing with reference to the salaries in the educational institutions of the country. The salaries in this institution are no exception to the rule. The amount of money appropriated for salaries by the legislature of 1917 was the exact amount appropriated by the legislature of 1915. During the biennium the amount appropriated for salaries was cut exactly in two by the depreciation in the value of the dollar. Government investigators of the Bureau of Statistics, in a report from Washington, D. C., under date of September 26, 1918, report that the cost of living has increased 67.17 percent since December, 1914. The increase was 13.36 percent since December, 1917, in articles used by the general public. Since the salaries at this institution remain practically where they were two years ago, it is clear that members of the faculty and employees of the institution have had their salaries reduced from 40 to 60 percent, the effect of this condition is obvious: First, educational institutions with larger incomes are able to select from less fortunate institutions the best talent among their faculties. Second, strange enough, cities supporting their own schools have been able, through an increase in salaries, to induce men and women to leave institutions supported by the entire state and go into the public schools of these cities. We are all familiar with the old saying that a fountain cannot rise higher than its source. If institutions maintained by the state for the preparation of teachers in the public schools cannot offer inducements that will keep good teachers from leaving these institutions and going into the public schools, then such institutions must fail. I desire to recommend that the Board ask the legislature for such an increase in the appropriation for salaries and wages as will insure the maintenance in this institution of a faculty in every way worthy of the institution and the state. Third, the demand for men and women in the government service and in the commercial world at large is so insistent, and promises so much more in a financial way, that large numbers of men and women who have prepared for a professional career in the educational world are leaving the profession simply because they cannot support their families under present prices and meet the obligations which are being laid upon them through the various war funds to which they are expected and desire to subscribe. Many of these men and women assumed, prior to our entrance into the war, financial obligations which they would have been able to meet had their incomes not depreciated as indicated above. Many of them bought homes, small farms, life insurance and other forms of property with the hope that when old age comes or misfortune overtakes them they and those dependent upon them would be in a position to take care of themselves. This whole question is far-reaching and vastly more fundamental, I fear, than the public in general realizes. The time has come when we must decide what type of men and what type of women we propose to have train our children for the responsibilities of citizenship and of life in general. Assuming that the Board may decide upon a uniform percentage of increase in the appropriations for salaries and wages for all of the schools, no recommendation is made here as to the percentage of increase in the appropriation for salaries at this institution. If this is not done, I recommend that the increase in the appropriation for salaries and wages at this institution be fifty percent.

APPROPRIATIONS.

In 1917 Mr. Charles H. Chandler, state architect, asked the legislature for $10,000 with which to grade the campus and lay walks in front of the Plumb Memorial Building, which stands back six hundred feet from Twelfth avenue. The removal of the old building and the location of the new building changed the whole plan of the campus and greatly enlarged that part of the campus which must be well graded and well kept. The legislature appropriated $5,000 for this purpose. The grading of the campus is still uncompleted. After the salvage from the old building had been removed there remained on the campus a vast quantity of rock, brickbats, lime and dirt which had to be removed before grading could be done and walks laid. In addition to the debris to be removed, there was a large quantity of brick, lumber, sheet metal and building stone which had to be hauled to another part of the campus. Much of this material remains the property of the state and is worth a goodly sum of money, but thus far it has not paid for the hauling. To pay for the removal of the debris and dirt around the old building and the hauling of the above material and the relaying of certain walks not included under the appropriation the maintenance fund was drawn upon in the sum of approximately $5,000.

At the time provision was made for erecting the cafeteria building, as stated above, no appropriation was made for the equipment of the same. In order to equip the second story for the home economics department and the first story for the cafeteria it was necessary to use approximately $10,000 from the maintenance fund. The School was under contract with the War Department to furnish subsistence for S. A. T. C. men; hence the above action became necessary. Owing to the above extraordinary expenditures, which were caused mainly by the fact that the War Department had established at the School a branch of the S. A. T. C., and also by the fact of the abnormal increase in the cost of material, labor and supplies during the war, and owing to the fact that the maintenance fund for this fiscal year has by that fact been depleted to the extent of $15,000, it is specially recommended that the Board of Administration ask the legislature to appropriate to the maintenance fund of this institution the sum of $15,000, to be available at once, during the fiscal year ending June 30, 1919, and that any unexpended balance remaining therein at the end of this fiscal year be reappropriated for the next fiscal year ensuing.

The attention of the Board is called to the importance of asking the legislature for sufficient funds with which to move the emergency hospital, the superintendent's residence and the power plant to a location on the east side of the state's property north of the cafeteria building. The location of the Plumb Memorial Building makes this action necessary. The power plant now stands immediately in front of the east end of the new administration building, where it is not only unsightly, but where it cannot fail to do damage to the building because of the smoke from the soft coal we are compelled to burn. A short time ago an expert examined the boilers and reported that they are in such condition that new ones must be had at an early date. The expense of setting boilers is such as to make it unwise to place new boilers in the old plant. For this reason, as well as for the reason stated above, it is strongly urged that funds be provided by the legislature of 1919 for moving the power plant. It has been estimated that $75,000 will be required to move the two houses mentioned above and the heating plant. This would include the cost of the two new boilers and the necessary accessories.

Reference is made elsewhere in this report to the need of funds with which to stucco the cafeteria building and erect a porch across the south side of the same. We have estimated that the stuccoing of this building will cost $1,900; the porch, $3,500. The size of the porch is predetermined by the building itself. The building cannot be right and cannot look right until such a porch as this item contemplates is built.

The matter of salaries is taken up under another heading. In this connection attention should be called to the fact that the salaries at this institution are practically all on the monthly basis. School has been running eleven months in the year only. Under the government regulations, requiring that the S. A. T. C. continue throughout the year, it will be necessary to increase the appropriation for salaries and wages sufficiently to cover the extra month. It is also imperative, as stated elsewhere, that the appropriation be increased sufficiently to enable the Board to increase salaries in general.

RECAPITULATION OF APPROPRIATIONS.

$5,000 to cover amount spent on campus from maintenance fund.

$10,000 to cover amount spent for equipment of home economics department and cafeteria. (As noted above, cafeteria has to be equipped to take care of S. A. T. C. men.)

$75,000 to cover cost of moving emergency hospital, power plant and superintendent's residence.

$15,000 to cover salaries and wages for month of August, due to the fact that school will be in session twelve months of the year instead of eleven.

$3,500 to cover cost of erecting porch on cafeteria building.

$1,900 to cover cost of stucco work on cafeteria building.

$3,000 to cover cost of completing stairway, reception room, furnishing same and installing electric-light fixtures in the cafeteria building.

$1,500 to cover cost of completing grading on the campus.

DEGREES CONFERRED AND CERTIFICATES ISSUED.

July 1, 1916, to July 1, 1918.

High-school diplomas	132
One-year state certificates	506
Three-year state certificates	329
Life certificates	443
Special certificates to teach—	
Agriculture	8
Commerce	16
Drawing	5
Home economics	14
Kindergarten	16
Manual training	8
Music	15
Physical training	17
Primary	74
Diplomas conferring—	
Degree, bachelor of science in education	140
Degree, bachelor of science in music	3
Music certificates—	
Teacher's certificate in voice	6
Teacher's certificate in piano	6
Teacher's certificate in violin	2
Teacher's certificate in cornet	1
Music diplomas—	
Voice	6
Piano	2
Special certificates in library science	3

Respectfully submitted.

THOS. W. BUTCHER, *President.*

FINANCIAL STATEMENT—INCOME AND EXPENDITURES.

The financial statement for the school at Emporia, for the biennial period ending June 30, 1918. Income provided and income expended.

	Collected or appropriated.	Balance on hand July 1, 1917.	Expended by school.	Balance on hand July 1, 1918.
Income from Students:				
Fees in hands of state treasurer July 1, 1916	$10,623 30			
Fees collected July 1, 1916, to June 30, 1917	37,837 60			
Fees expended July 1, 1916, to June 30, 1917			$48,363.34	
Balance in hands of state treasurer July 1, 1917		$97.56		
Fees collected July 1, 1917, to June 30, 1918	34,330.82			
Fees expended July 1, 1917, to June 30, 1918			29,817.51	
Fees in hands of state treasurer July 1, 1918				$4,610.87
Student activities:				
Fees collected July 1, 1917, to June 30, 1918	6,549.00			
Fees expended July 1, 1917, to June 30, 1918			4,331.56	
Fees in hands of state treasurer July 1, 1918				2,217.44
Income from Wrecking Sales (cafeteria construction):				
Moneys collected July 1, 1917, to July 1, 1918	4,827.65			
Money expended			4,781.09	
Balance on hand July 1, 1918 (lapsed)				46.56
Interest on Endowment:				
Balance in hands of state treasurer July 1, 1916	3,100.67			
Collected July 1, 1916, to June 30, 1917	14,044.74			
Expended July 1, 1916, to June 30, 1917			9,438.47	
Balance in hands of state treasurer July 1, 1917		7,706.94		
Collected July 1, 1917, to June 30, 1918	12,384.45			
Expended July 1, 1917, to June 30, 1918			15,950.77	
Balance in hands of state treasurer July 1, 1918				4,140.62
Direct Appropriations:				
Maintenance, 1916-1917	162,000.00			
Balance in hands of state treasurer July 1, 1916	10.63			
Expended July 1, 1916, to June 30, 1917			162,010.63	
Maintenance, 1917-1918	44,000.00			
Expended July 1, 1917, to June 30, 1918			38,930.76	
Balance in hands of state treasurer July 1, 1918				5,069.24
Salaries and wages	122,500.00			
Expended July 1, 1917, to June 30, 1918			122,498.27	
Balance in hands of state treasurer July 1, 1918				1.73
Repairs and improvements, 1916-1917	2,500.00			
Balance on hand July 1, 1916	2,005.49			
Expended July 1, 1916, to June 30, 1917			3,330.77	
Repairs and improvements, 1917-1918	2,500.00			
Balance on hand July 1, 1917		1,174.72		
Expended July 1, 1917, to June 30, 1918			2,908.48	
Balance on hand July 1, 1918				766.24

President's contingent, 1916-1917	500.00			
Balance on hand July 1, 1916	489.21			
Expended July 1, 1916, to June 30, 1917			228.80	
Balance on hand July 1, 1917		760.41		
Appropriated, 1917-1918	500.00			
Expended July 1, 1917, to June 30, 1918			593.65	
Balance on hand July 1, 1918				666.76
Plumb Memorial Building	87,500.00			
Balance on hand July 1, 1916	43,523.95			
Expended July 1, 1916, to June 30, 1917			135,206.96	
Appropriated, 1917-1918	5,423.36			
Balance on hand July 1, 1917		1,240.35		
Expended July 1, 1917, to June 30, 1918			1,240.35	
Toilet equipment	3,790.00			
Expended July 1, 1916, to June 30, 1917			1,088.73	
Balance on hand July 1, 1917		2,701.27		
Expended July 1, 1917, to June 30, 1918			2,691.65	
Balance on hand July 1, 1918				9.62
Telephone installation	1,800.00			
Expended July 1, 1916, to June 30, 1917			1,640.18	
Balance on hand July 1, 1917		159.82		
Expended July 1, 1917, to June 30, 1918			138.55	
Balance on hand July 1, 1918				21.27
Ventilation fans	700.00			
Balance on hand July 1, 1917		700.00		
Expended July 1, 1917, to June 30, 1918			696.36	
Balance on hand July 1, 1918				3.64
Opera chairs	6,000.00	6,000.00		
Expended July 1, 1917, to June 30, 1918			6,000 00	
Stage equipment	2,500.00			
Expended July 1, 1916, to June 30, 1917			79.30	
Balance on hand July 1, 1917		2,420.70		
Expended July 1, 1917, to June 30, 1918			2,018.11	
Balance on hand July 1, 1918				402.59
Shades	762.00			
Balance on hand July 1, 1917		762.00		
Expended July 1, 1917, to June 30, 1918			760.00	
Balance on hand July 1, 1918				2.00
Desks	775.00			
Balance on hand July 1, 1917		775.00		
Expended July 1, 1917, to June 30, 1918				
Balance on hand July 1, 1918				775.00
Classroom chairs	4,500.00			
Balance on hand July 1, 1917		4,500.00		
Expended July 1, 1917, to June 30, 1918			4,011.15	
Balance on hand July 1, 1918				488.85
Lighting equipment	2,000.00			
Balance on hand July 1, 1917		2,000.00		
Expended July 1, 1917, to June 30, 1918			1,876.50	
Balance on hand July 1, 1918				123.50

FINANCIAL STATEMENT—CONCLUDED.

	Collected or appropriated.	Balance on hand July 1, 1917.	Expended by school.	Balance on hand July 1, 1918.
DIRECT APPROPRIATIONS—Concluded:				
Sidewalks and grading	$5,000.00			
Balance on hand July 1, 1917		$5,000.00		
Expended July 1, 1917, to June 30, 1918			$4,789.38	
Balance on hand July 1, 1918 (lapsed)				$210.62
Wrecking old administration building	14,000.00			
Expended July 1, 1916, to June 30, 1917			67.50	
Balance on hand July 1, 1917		13,932.50		
Expended July 1, 1917, to June 30, 1918			13,930.47	
Balance on hand July 1, 1918 (lapsed)				2.03
Library foundation	5,000.00			
Expended July 1, 1916, to June 30, 1917			160.00	
Balance on hand July 1, 1917		4,840.00		
Expended July 1, 1917, to June 30, 1918			4,687.72	
Balance on hand July 1, 1918 (lapsed)				152.28
Totals	$643,977.87	$54,771.27	$624,267.01	$19,710.86

Western University

State Industrial Department

Quindaro, Kansas

Biennial Report of the Trustees

For the Biennium
Beginning December 1, 1916, and
Ending December 1, 1918

KANSAS STATE PRINTING PLANT
W. R. SMITH, State Printer
TOPEKA. 1918
7-5160

REPORT OF TRUSTEES.

WESTERN UNIVERSITY,
QUINDARO, KAN., December 1, 1918.

To His Excellency, Governor Arthur Capper:

SIR—We beg to submit our report for the period covering the two years from December 1, 1916, to December 1, 1918.

On February 25, 1918, Dr. H. T. Kealing, the president, after a lingering illness of two years, passed away, beloved and revered by all as a man, educator and distinguished citizen. During his illness and after his death the administration of the institution devolved upon the vice president, Prof. Shelton French, until September 1, 1918.

On May 16, 1918, Dr. F. Jesse Peck was elected president and superintendent of the State Industrial Department, and he assumed his duties September 1 following. He was cordially received, and the work is proceeding splendidly and successfully under his guidance.

The institution maintains a high standard in the quality of its educational activities, and year by year draws unto itself a better class of student material. There is no limit to what the future may develop out of our present opportunities here.

It is our duty to do the things nearest at hand, do them well, and at the same time enlarge the scope of activities and influence to the end that we may send out into life men and women trained in hand, head and heart, loyal, patriotic, intelligent, industrious, useful citizens.

Old régimes—political, industrial and economic—are falling away. The great World War that has just closed will not only change our maps, but will also change our ideas and ideals. We shall be less theoretical and aristocratic, more practical and democratic. As we enter farther and farther into this new era, more stress will be placed upon education, especially industrial education, which is to play such an active and important part in reconstructing the waste places, supplying the needs and maintaining the standards of our Christian civilization.

ON THE APPROVED ACCREDITED LIST.

For several years Western University has been strengthening her faculty and improving both her industrial and literary work with the hope and view that its efficiency would some day be recognized by the State Board of Education and put on the approved accredited list.

We are pleased to say to you that Mr. L. D. Whittemore, secretary of the State Board of Education, visited the institution last spring, spent two days in carefully inspecting our work, made a number of suggestions, revised our curriculum, and on June 5 recommended to the board that the institution be approved. On June 17, 1918, Western University, by vote of the State Board of Education, was approved, subject to the revision of the curriculum. On July 5, 1918, the state and University boards, through executive committees in joint session, adopted the recommendations and revised curriculum of the State Board of Education, which immediately placed the institution on the much-coveted approved list.

We realize that as greater opportunities come to us we must prepare to fill this larger sphere by assuming greater responsibilities and rendering greater service to the state and humanity. We have the vision, and, further, the hardihood, to bring about its materialization, provided the institution is adequately supported by the state legislature.

TEACHERS AND EQUIPMENT.

It is needless for us to discuss with you the high cost of living and materials, because in a direct and most practical way you are already cognizant of these facts.

The teachers at Western University are very poorly paid for their very splendid services. In fact, more than half of the faculty resigned during the summer and early autumn to accept similar positions elsewhere at a much increased salary, and in several instances double that received here. We have had to raise some salaries to secure new teachers, and increase that of others to retain them. Our teachers are paid less than those in the public schools. Unless the institution raises wages it will be difficult to retain or secure competent teachers. Fuel, supplies and equipment have almost doubled in cost.

To avoid a deficit we closed school on the 16th of last May, instead of finishing the school year on June 6. The appropriation made by the twentieth biennial session of the legislature was in American peace times, to meet peace needs. Two months after the appropriation war came on, with war prices and war salaries. Under present economic conditions our appropriation is inadequate to operate the institution.

WAR WORK.

In May of the present year the trustees contracted with the government to do vocational work in the army preparatory for overseas duty. From June 15 to August 15 the institution trained 105 Kansas Negro soldiers in electricity, carpentry, general blacksmithing and wheelwrighting, horseshoeing, and in concrete work and masonry. From August 15 to October 15 the institution trained 110 Mississippi Negro soldiers in similar trades. From October 15 to December 15 we have in process of training 130 Kansas-Missouri Negro soldiers, being similarly trained as heretofore, except that automobile repair and driving is substituted for concrete work and masonry, with double the number taking auto work. The total number of soldiers trained to date is 345.

In order to be loyal, patriotic and serviceable to the national government in time of dire need we had to spend several thousand dollars for material, tools, equipment, construction of a garage, and in the purchase of some second-handed autos. But these become the permanent property of the institution, and a splendid educational investment. Also, the institution becomes the beneficiary of the soldier students' labor. As a result we have beautiful concrete walks, concrete retaining walls, installation of fire escapes on Stanley Hall, a garage, buildings and campus rewired for electric lighting and approved by the city inspector, the erection of substantial poultry houses and runs for breeding purposes, and a number of minor improvements, such as glazing, repairing roofs, locks, windows, doors, etc.

This work has been very acceptable and satisfactory to the government officials and inspectors, and a source of no small degree of pride to us, knowing that less than a dozen Negro schools in the whole country were invited to participate in this work. This is conclusive evidence that Western University ranks among the best Negro educational institutions in the nation.

We further would have you know that in order to accommodate the army contingent it was necessary to give them Grant Hall, the girls' dormitory, the best structure on the campus, thus having inconvenienced the girls by crowding them into inadequate quarters. To their credit, be it said, they accepted the change unselfishly, feeling it their patriotic duty to make this sacrifice of their commodious building, and thus contribute their bit toward winning the war.

BUILDINGS.

All of the institutional buildings are of brick, steam heated and electric lighted. The state owns Stanley Hall, Grant Hall, studio building, mechanics building, steam laundry building, and a splendid three-story brick barn. Each of these six buildings is in sore need, more or less, of repair. In fact, in some of these buildings the conditions are very uninviting and unsightly, the deterioration so great that unless repairs are made soon the loss to the state will be well-nigh irreparable.

HEATING SYSTEM.

Our heating system is sadly in need of thorough overhauling and repair. Better still, the institution ought to have a central steam heating plant. This would require less fuel, fewer employees, and at the same time render far greater satisfaction in producing a comfortable temperature for even the most inclement weather.

VOCATIONAL TRAINING.

As 90 percent of the people in some way must toil with their hands, it more and more becomes evident that the individual should specialize and become skilled in some sort of labor, some definite vocational pursuit. It is a true saying, "Jack of all trades and good at none."

Every boy and girl should be taught the dignity of labor, the value of time, and the wisdom of being industrious and dependable. They should be taught at least to do one thing and do it well, or perhaps better than any one else can do it. That is the basic principle, the importance and value of industrial education.

At this time we are conducting the following industrial or trades classes:

For Boys:
- Carpentry.
- Cabinetmaking.
- Tailoring.
- Blacksmithing.
- Horseshoeing.
- Wheelwrighting.
- Steam engineering.
- Electrical engineering.
- Mechanical drawing.
- Architectural drawing.
- Printing and bookbinding.
- Stock raising.
- Auto building, repairing and driving.

For Girls:
- Sewing.
- Millinery.
- Domestic science.
- Household economy.
- Nurse training.

For Both Sexes:
- Full and complete commercial course.
- Music.
- Agriculture.
- Steam laundering.
- China, water and oil painting.
- Landscape gardening.
- Poultry raising.

These departments have sent out a number of students who are doing exceptionally well, and earning a livelihood by what they learned here. We are proud of them, and they in turn are proud of their alma mater.

Enrollment for present scholastic year to date: Military students, 345; civilian students, 275; total, 620.

APPROPRIATIONS.

The amount of appropriations available for the biennium beginning July 1, 1917, and ending June 30, 1919, was as follows:

	1917-'18.	*1918'-19.*
Fund No. 1	$20,000	$20,000
2	7,425	7,425
3	1,000	1,000
4	1,000	1,000
5	500	500
6	2,500	2,500
7	1,000	1,000
8	300	300
9	200	200
10	250	250
11	250	250
12	250	250
13	200	200
14	300	300
15	200	200
16	300	300
17	500	500
18	250	250
19	250	250
Totals	$36,675	$36,675

RECOMMENDATIONS.

The school has grown to such proportions that an administration and academic building is imperative. Not only could this building be used for offices and literary classes, but it could also house the school library, the commercial department, and if three stories high, the upper floor could be utilized for commencement and all other occasions bringing large gatherings to the institution.

The institution has but one recitation room commensurate with its needs, and that is used for the classes in mathematics. The science, English and history classes are conducted in dark, unwholesome basement rooms. Other classes are in rooms entirely too small and with inadequate seating accommodations. We recommend that the state build or purchase a residence for the home of the president.

It is absolutely necessary that the president live near the school. At present he is subject to the whims of any local landlord of whom he may rent; and sometimes it is almost impossible to secure a house that is at all comfortable and convenient.

We recommend the purchase of a dairy herd, which, while furnishing milk and butter to the student body, at the same time would offer facilities for splendid training in the care of stock and give practical experience in dairying.

We recommend the purchase of ten thoroughbred brood sows, from which a herd of swine might soon be developed, whereby the students could be furnished meat, and some put on the market.

We further recommend the erection of a hatchery to house the school's incubators, which now have a capacity for four thousand eggs.

BUDGET OF NEEDED APPROPRIATIONS FOR 1919-1921.

After carefully going over the condition of the institution with whose management you have honored us, we recommend the following appropriations as necessary for the proper maintenance and growth of the State Industrial Department at Western University for the two ensuing years from July 1, 1919, to June 30, 1921:

	1919-'20.	*1920-'21.*
Salaries and wages	$30,000	$30,000
Maintenance	25,000	25,000
Administration and academic building	35,000	......
Residence for superintendent	4,000	......
Dairy herd	1,500	......
Swine herd	500	......
Poultry hatchery building (material)	1,000	......
Central heating plant	15,000	......
	$112,000	$55,000

By a most careful and economic estimate we ask for $167,000 for Western University during the ensuing biennium. We ask that all equipment, supplies, materials, repairs, fuel, freight, etc., be provided out of one fund, namely, maintenance.

FINANCIAL STATEMENT.

December 1, 1916, to June 30, 1918, inclusive.

The following figures show the receipts from all sources and expenditures from the same:

MAINTENANCE FUND, NO. 1.

Amount available December 1, 1916		$14,482.59
Expended:		
1916—December	$2,312.40	
1917—January	2,329.44	
February	2,070.30	
March	2,416.79	
April	2,244.23	
May	2,140.17	
June	968.13	
		14,481.46
Reverted		$1.13

EQUIPMENT FUND, NO. 2.

Amount available December 1, 1916		$2,756.81
Expended:		
1916—December	$874.30	
1917—January	53.45	
February	221.63	
March	55.50	
April	146.60	
May	393.05	
June	1,008.52	
		2,753.05
Reverted		$3.76

LIBRARY FUND, NO. 3.

Amount available December 1, 1916		$278.88
Expended:		
1917—January	$6.55	
April	9.00	
May	3.50	
June	259.83	
		278.88

GYMNASIUM FUND, NO. 4.

Amount available December 1, 1916		$233.44
Expended:		
1916—December	$135.52	
1917—January	43.85	
March	11.10	
April	42.15	
		232.62
Reverted		$0.82

AGRICULTURE AND DAIRYING, NO. 5.

Amount available December 1, 1916		$1,791.82
Expended:		
1916—December	$17.40	
1917—January	69.78	
March	68.75	
April	90.95	
May	545.28	
June	998.13	
		1,790.29
Reverted		$1.53

FUEL AND FREIGHT FUND, NO. 6.

Amount available December 1, 1916		$1,011.47
Expended:		
1916—December	$17.07	
1917—January	470.47	
March	358.98	
April	151.70	
		998.22
Reverted		$13.25

ADDITIONS AND REPAIRS FUND, NO. 7.

Amount available December 1, 1916		$841.44
Expended:		
1916—December	$76.02	
1917—January	96.44	
February	21.45	
March	28.70	
April	206.93	
May	72.04	
June	337.70	
		839.28
Reverted		$2.16

APPROPRIATED FUNDS,

July 1, 1917, to December 1, 1918.

SALARIES AND WAGES FUND, NO. 1.

Amount available July 1, 1917		$20,000.00
Expended:		
1917—July	$791.17	
August	816.67	
September	1,912.67	
October	2,026.67	
November	2,177.34	
December	2,192.97	
1918—January	2,153.29	
February	2,181.67	
March	1,990.00	
April	1,990.00	
May	1,036.00	
June	585.00	
		19,854.11
Reappropriated		$145.89

Maintenance Fund, No. 2.

Amount available July 1, 1917		$7,425.00
Expended:		
1917—July	$7.50	
September	579.61	
October	791.10	
November	683.83	
December	255.88	
1918—January	2,742.74	
February	1,687.92	
March	347.46	
April	247.69	
May	21.25	
June	52.39	
		7,417.37
Reappropriated		$7.63

Equipment Fund, No. 3.

Amount available July 1, 1917		$1,000.00
Expended:		
1917—August	$39.85	
September	77.07	
October	211.80	
November	92.18	
1918—January	84.84	
February	25.00	
March	355.28	
April	25.70	
May	79.38	
June	7.65	
		998.75
Reappropriated		$1.25

Agriculture and Dairying Fund, No. 4.

Amount available July 1, 1917		$1,000.00
Expended:		
1917—July	$383.51	
August	91.99	
September	357.97	
October	64.55	
1918—January	12.00	
March	12.00	
April	17.67	
May	39.65	
		979.34
Reappropriated		$20.66

Fuel and Freight Fund, No. 5.

Amount available July 1, 1917		$500.00
Expended:		
1917—September	$36.97	
October	37.85	
November	300.13	
December	37.47	
1918—February	83.73	
June	1.83	
		497.98
Reappropriated		$2.02

Additions and Repairs, No. 6.

Amount available July 1, 1917		$2,500.00
Expended:		
1917—August	$97.36	
September	580.41	
October	1,049.56	
November	54.00	
December	97.50	
1918—January	130.35	
February	33.63	
March	58.75	
May	384.50	
		2,486.06
Reappropriated		$13.94

Laundry Equipment Fund, No. 7.

Amount available July 1, 1917		$1,000.00
Expended:		
1917—August	$92.27	
September	430.28	
October	71.41	
November	114.10	
1918—February	74.02	
March	5.50	
		787.58
Reappropriated		$212.42

Blacksmithing Fund, No. 8.

Amount available July 1, 1917		$300.00
Expended:		
1917—August	$21.52	
1918—February	57.33	
April	9.71	
		188.56
Reappropriated		$211.44

Domestic Science Fund, No. 9.

Amount available July 1, 1917		$200.00
Expended:		
1917—October	$16.76	
November	14.13	
1918—January	45.35	
February	27.06	
March	9.94	
April	21.10	
May	51.04	
June	13.36	
		198.74
Reappropriated		$1.26

AUTO REPAIRING FUND, NO. 10.

Amount available July 1, 1917		$250.00
Expended:		
1917—August	$30.17	
October	10.87	
1918—January	111.63	
February	24.53	
April	41.61	
June	31.02	
		249.83
Reappropriated		$0.17

PRINTING FUND, NO. 11.

Amount available July 1, 1917		$250.00
Expended:		
1917—August	$12.97	
October	10.05	
November	24.45	
1918—January	5.60	
February	16.50	
March	38.00	
April	83.27	
May	17.66	
June	9.50	
		218.00
Reappropriated		$32.00

LIBRARY FUND, NO. 12.

Amount available July 1, 1917	$250.00
Expended: 1918—January	98.30
Reappropriated	$151.70

TAILORING FUND, NO. 13.

Amount available July 1, 1917		$200.00
Expended:		
1917—October	$113.30	
November	......	
December	87.45	
		194.75
Reappropriated		$5.25

COMMERCIAL DEPARTMENT FUND, NO. 14.

Amount available July 1, 1917		$300.00
Expended:		
1918—January	$3.75	
March	3.50	
April	31.94	
May	20.43	
		59.62
Reappropriated		$240.38

Sewing Department Fund, No. 15.

Amount available July 1, 1917		$200.00
Expended:		
1917—August	$99.12	
November	89.72	
1918—February	3.06	
		191.90
Reappropriated		$8.10

Carpentry Department Fund, No. 16.

Amount available July 1, 1917	$300.00
Expended: 1917—October	293.05
Reappropriated	$6.95

Fire Escape Fund, No. 17.

Amount available July 1, 1917	$500.00
Reappropriated	500.00

Bricklaying Department Fund, No. 18.

Amount available July 1, 1917	$250.00
Reappropriated	250.00

Stonemasonry Department Fund, No. 19.

Amount available July 1, 1917	$250.00
Reappropriated	250.00

Salaries and Wages Fund, No. 1.

Amount available July 1, 1918		$20,145.89
Expended:		
1918—July	$450.00	
August	391.12	
September	1,745.33	
October	2,069.70	
November	1,868.42	
		6,524.59
Balance December 1, 1918		$13,621.31

Maintenance Fund, No. 2.

Amount available July 1, 1918		$7,432.63
Expended:		
1918—July	$594.58	
August	129.27	
September	400.66	
October	1,388.24	
November	774.24	
		3,286.99
Balance December 1, 1918		$4,145.64

Equipment Fund, No. 3.

Amount available July 1, 1918	$1,001.25
Expended: 1918—October	1,001.20
Balance December 1, 1918	$0.05

Agriculture Fund, No. 4.

Amount available July 1, 1918		$1,020.66
Expended:		
1918—July	$74.09	
August	92.70	
September	6.88	
October	238.76	
November	100.40	
		512.83
Balance December 1, 1918		$507.83

Fuel and Freight Fund, No. 5.

Amount available July 1, 1918		$502.02
Expended:		
1918—July	$446.13	
August	55.62	
		501.75
Balance December 1, 1918		$0.27

Additions and Repairs Fund, No. 6.

Amount available July 1, 1918		$2,513.94
Expended:		
1918—July	$577.86	
August	287.38	
September	440.06	
October	112.06	
November	66.42	
		1,483.78
Balance December 1, 1918		$1,030.16

Laundry Equipment Fund, No. 7.

Amount available July 1, 1918	$1,212.42
Expended: 1918—November	57.87
Balance December 1, 1918	$1,154.55

Blacksmithing Fund, No. 8.

Amount available July 1, 1918		$511.44
Expended:		
1918—July	$429.60	
August	61.18	
		490.78
Balance December 1, 1918		$20.66

Domestic Science Fund, No. 9.

Amount available July 1, 1918	$201.26
Expended: 1918—October	45.28
Balance December 1, 1918	$155.98

Auto Repairing Fund, No. 10.

Amount available July 1, 1918	$250.17
Expended: 1918—July	68.37
Balance December 1, 1918	$181.80

PRINTING FUND, NO. 11.

Amount available July 1, 1918		$282.00
Expended: 1918—October		280.80
Balance December 1, 1918		$1.20

LIBRARY FUND, NO. 12.

Amount available July 1, 1918		$401.70
Expended: 1918—November		116.90
Balance December 1, 1918		$284.80

TAILORING FUND, NO. 13.

Amount available July 1, 1918		$205.25
Expended:		
1918—October	$32.50	
November	172.75	
		205.25

COMMERCIAL DEPARTMENT FUND, NO. 14.

Amount available July 1, 1918		$540.38
Expended: 1918—November		30.90
Balance December 1, 1918		$509.48

SEWING FUND, NO. 15.

Amount available July 1, 1918		$208.10
Expended: 1918—October		208.10

CARPENTRY FUND, NO. 16.

Amount available July 1, 1918		$306.95
Balance December 1, 1918		306.95

FIRE ESCAPE FUND, NO. 17.

Amount available July 1, 1918		$1,000.00
Expended:		
1918—July	$20.32	
October	462.00	
		482.32
Balance December 1, 1918		$517.68

BRICKLAYING FUND, NO. 18.

Amount available July 1, 1918		$500.00
Expended: 1918—July		224.55
Balance December 1, 1918		$275.45

STONEMASONRY FUND, NO. 19.

Amount available July 1, 1918		$500.00
Expended: 1918—July		444.08
Balance December 1, 1918		$55.92

CURRENT FUNDS.

	Received.	*Expended.*
Balance December 1, 1916	$783.92	......
1916—December	465.37	$138.30
1917—January	343.76	483.09
February	368.10	405.50
March	378.01	405.49
April	558.38	351.47
May	460.78	315.99
June	384.06	503.38
July	77.58	974.14
September	749.45	277.59
October	467.76	273.65
November	383.57	484.98
December	273.53	240.14
1918—January	388.55	316.08
February	393.24	207.97
March	365.13	580.93
April	290.86	366.57
May	366.93	564.38
June	47.65	419.59
July	46.05	198.85
August	30.19	66.79
September	876.74	92.94
October	410.16	308.94
November	272.30	240.11
	$9,182.07	$8,216.87
To balance December 1, 1918	......	965.20
	$9,182.07	$9,182.07

Thanking you for the trust reposed in us, which we have faithfully tried to justify, this report is respectfully submitted.

H. B. PARKS, President,
J. R. RANSOM, Vice President,
E. L. BELL, Secretary,
J. C. C. OWENS,
W. H. KING,
U. S. GUYER,
F. JESSE PECK, Superintendent,
Board of Trustees.

□

BIENNIAL REPORT

OF THE

KANSAS
SCHOOL FOR THE DEAF

OLATHE, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

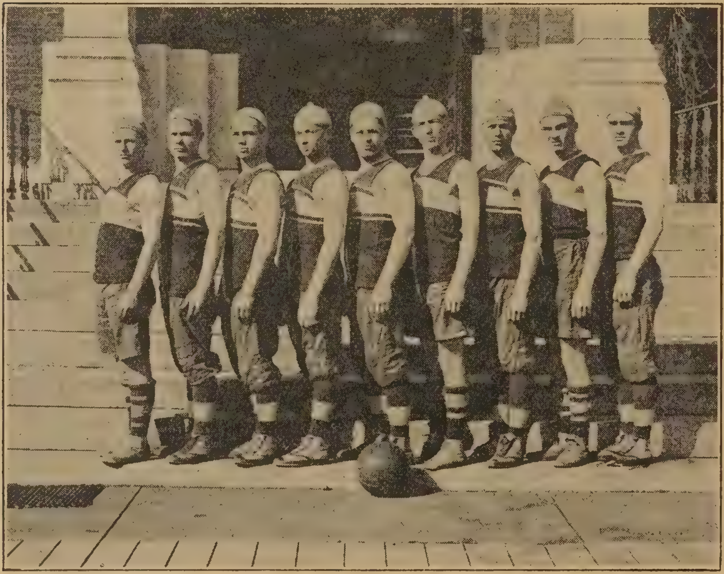
STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Chairman.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

OFFICERS OF THE SCHOOL:

MRS. KATE S. HERMAN	Superintendent.
GEORGE W. FOLMER	Steward.
MISS NORA WHEELER	Matron.
F. P. HATFIELD, M. D.	Physician.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1918
7-5032



STAFF OF INSTRUCTORS.

TEACHERS.

MANUAL CLASSES.

Eva O. Dold.
J. J. Dold.
Chas. H. Eldridge.
Paul D. Hubbard.
Ed H. McIlvain.
Katharine R. Meldrum.
A. L. Roberts, A. M.
D. S. Rogers, A. B.
Mary F. Murray, Art Teacher.

ORAL CLASSES.

Myrtle Collatt.
Rachel E. Foster.
Ethelwyn Hammond.
Leslie Hoge.
Florence Loar.
Elnora Palm.
Mary R. Russell.
Nettie Sanford.
Margaret J. Stevenson.
Lida B. Wood.
Clara S. Worley.

INDUSTRIAL DEPARTMENT.

Martha Hanes, Domestic Science.
J. H. Cartwright, Shoe and Harness Shop.
J. A. Key, Cabinet Shop.
Pat Ryan, Bakery.
Carrie J. Wilson, Sewing.

DOMESTIC DEPARTMENT.

Mrs. Kate Herman, Superintendent.
Miss Nora Wheeler, Matron.
Ora N. Filkins,
Stenographer and Bookkeeper.
Elizabeth Mathews, Nurse.
Mrs. Harriet Jenks, Nurse Assistant.
J. J. Lehman, Engineer.
S. R. Woodside, Nightwatch.
Mary Jenkins, Nightwatch.

PHYSICAL CULTURE TEACHERS.

Luther H. Taylor.
Persis Colie.

SUPERVISORS.

L. H. Taylor, Boys' Supervisor.
John Dusch, Assistant Boys' Supervisor.
Mary Hormuth, Girls' Supervisor.
Anna Moore, Assistant Girls' Supervisor.
Mrs. Clara Pearson, Asst. Girls' Supervisor.

TIME SCHEDULE.

FOR THE SCHOOL WEEK.

Morning call	5:30 a. m.
Pupils rise	5:45 a. m.
Breakfast	6:30 a. m.
Chapel	7:45 a. m.
School and trades	8:00 a. m.
Recess	10:20 a. m.
School and trades	10:30 a. m.
Dinner, officers and employees,	12:00 m.
Close of school and trades	12:20 p. m.
Dinner, pupils	12:30 p. m.
School and trades	1:45 p. m.
Close of school and trades	4:30 p. m.
Supper	6:00 p. m.
Study hour begins	7:00 p. m.
Retire	7:00, 8:00, 9:00, 9:30 p. m.

FOR SATURDAYS.

Trades	8:00 to 11:30 a. m.

FOR SUNDAYS.

Morning call	6:30 a. m.
Breakfast	7:00 a. m.
Sunday school	9:30 to 10:30 a. m.
Dinner	12:30 p. m.
Chapel	3:00 p. m.
Supper	6:00 p. m.
Y. M. C. A.	7:00 to 8:00 p. m.
Christian Endeavor	7:00 to 8:00 p. m.

SUPERINTENDENT'S REPORT.

To the State Board of Administration:

GENTLEMEN—I have the honor to submit to you the biennial report of the Kansas School for Deaf, covering the period from July 1, 1916, to July 1, 1918.

During this biennium 270 pupils have been enrolled; of these 155 were boys and 115 were girls; 47 were new pupils. Forty-seven of those enrolled during the first year did not return last year for the following reasons:

14 moved out of the state.
17 reached age of twenty-one and quit to go to work.
1 married.
1 kept at home to work.
6 graduated in 1917.
3 unknown reasons.
4 sick.
1 went to hearing school.
8 were awarded diplomas of graduation on May 4, 1918.

MANNERS AND MORALS.

Our school discipline continues exceptionally good and is a matter of appreciative comment from our townspeople as well as from those connected with our own household.

We find that a systematic busyness makes for healthful, wholesome morals and manners. Active participation and rivalry in the school, shops and sports; organized study, work and play, so alternated as to insure the children's growth and happiness, leave little time or inclination for questionable conduct, in spite of the fact that there are no bolts or bars here to prevent a boy from running away if he determines to indulge his wanderlust.

We work on the plan that these children continue to belong to their parents, and the parents retain personal responsibility for them. The privileges accorded pupils have not yet been abused and are a source of gratification to the parents.

Among our enrollment are Jews, Catholics, and all denominations of Protestants; hence the institution is nonsectarian. However, systematic moral and religious instruction of a general nature, such as is accepted by all churches and creeds, is given.

We have our morning chapel exercises and a Sunday sermon given by our own teachers or by clergymen from the various churches of the town. We have Sunday school every Sunday morning, with Young Men's Christian Association and Christian Endeavor meetings Sunday evenings. These are some of the ways in which we make a special effort to instill moral ideas.

EDUCATIONAL DEPARTMENT.

Teachers of hearing children have probably little conception of the magnitude of the task that confronts the teacher of the deaf child at the outset.

The hearing child begins to learn language practically in the cradle, and by the time he enters school he has a working foundation of spoken language for the teacher to build on. It is far different with the deaf child. As a rule, when he enters school at the age of seven years he has not a word of language. He does not even know his own name, or that anything has a name. Therefore, the teacher of the deaf child has to begin at the beginning of things, and the problems presented are not ordinary ones. That the deaf child must have more time than his hearing brother to reach a common level is readily apparent. To expect equal progress of the two, year by year, is to expect an impossibility. Deafness does make a difference, but deafness and mental defects are not necessarily associated. There is no more connection between deafness and mental defect than there is between lameness or blindness and mental defect. So when children, deaf through heredity, or congenitally, are mentally defective, the cause is not the deafness, but some condition which causes both the deafness and the other defect.

America leads all other nations in educating the deaf. The first school for the deaf in the United States was founded at Hartford, Conn., in 1817. The Kansas School for Deaf was founded in 1861, and we are justly classified as an educational institution. The majority of our pupils are totally deaf; the others too deaf to be educated in the public schools. However, they are mentally normal, according to their opportunities. We are not prepared to take care of children who are mentally deficient.

INDUSTRIAL DEPARTMENT.

Schools for the deaf were first to include the teaching of trades in their courses of study. The work of our shops proves their usefulness as factors in helping our graduates to be self-supporting, self-respecting citizens, which is the prime condition of all education. We teach not only manual training, but real trades—carpentry, cabinet making, shoemaking, harness making, baking, etc.—and the boys are ready for real work when they finish school.

This may be said also of the girls, with their varied lines of industrial and domestic training. They are taught domestic science, domestic art, basket weaving, all kinds of plain sewing, ironing, and other branches of home making.

There is no just comparison between the hearing and the deaf child as to the crime of nonattendance at school, because the hearing child is receiving some kind of an education every hour of his life through his ability to hear and his association with hearing, speaking people, while to the deaf child this sort of an education is wholly denied. In this connection allow me to call attention to chapter 384, Laws of 1905 (§§ 9441, 9442, 9443, G. S. 1915), which is "An act to promote the attendance of deaf children at proper schools for their training and education; to provide penalties for violation of this act and to repeal all acts in conflict therewith."

OUTLINE OF COURSE OF STUDY.

The course of study in language and all other subjects, except speech and lip-reading, is the same in all departments.

During the first five years of school life the order of development of language principles is, in the main, that of Miss Sweet's "First Lessons in English," Nos. 1, 2, 3 and 4. The vocabulary during these years is that of Miss Sweet's books, with such changes or additions as are found necessary.

For the sixth and subsequent years there is no generally accepted guide like Miss Sweet's books, but our own course of study gives a detailed outline of each year's work and offers suggestions for the application of the principles taught during the year.

The "five-slate system" is used in developing new language principles in the primary and intermediate grades.

There is regular and systematic daily instruction in "good morals and gentle manners" in all grades. Work along this line is not optional with the teacher; it is obligatory.

Careful attention is given to moral training, and a gratifying percent become members of the church. One can well understand how grateful the teacher feels when these deaf pupils, who came to school without knowing their own names, make public confession, "I believe in God, the Father Almighty, and in Jesus Christ, his only begotten son."

FIRST YEAR.

Tone and rhythm.
Sense-training exercises.
Penmanship.
Five-slate system.
Vocabulary:
    Nouns: 120 or more.
    Verbs: 50 to 60.
    Numbers: 1 to 10 and 11 to 20.
    Adjectives: 20 to 30.
    Pronouns: All the personal pronouns in both numbers and all cases.
    The interrogative: Who.
    Prepositions: 5 or 6.
    Adverbs: Not, yesterday, to-day.
    Conjunction: And.
    Articles: An, a, the.
    Simple colloquial forms.

SECOND YEAR.

Tone and rhythm.

Hektograph lessons for the pupils are prepared out of school. These furnish constant material for review for the pupils. The necessity for constant review cannot be emphasized too strongly, as only by constant review, by constant repetition, can impressions be made permanent.

During the second year the class should finish language principles in Miss Sweet's First Book and of the first four lessons of the Second Book.

Conversational language is given just as fast as the pupils can grasp it.

During the second year questions and answers form an important part of every day's work.

During the second year, unless pupils are exceptionally young or backward, they will add to the vocabulary of the first year—

Nouns: 275 to 300.
Verbs: 125.
Auxiliary verbs: 9.
Pronouns: All.
Adjectives: 60 to 75.
Adverbs and time phrases: 40 to 50.
Prepositions: 18.
Conjunctions: 1.
Negative forms: 15.
General questions.
Calendar work.

THIRD YEAR.

As in the second year, hektograph books prepared out of school are placed in the hands of the pupils. These are the pupils' textbooks, and contain exercises in language, drill work, stories, development of language, principles, number work, etc., prepared by the teacher.

Tone and rhythm.

Drafts of letters, journals and other compositions by the pupils are recorded in books reserved for that purpose.

The vocabulary of the third year includes that of the first year and that of the second year. The teacher is not restricted to this vocabulary, but should teach as many more words as the advancement and ability of the class will permit.

The ground to be covered is the principles of Miss Sweet's Second Book, using the five-slate system for recording actions and for correcting mistakes of letters, journals, etc.

Also teach time and its divisions; the time by the clock; time phrases.

General questions.

Description of persons, places, things and pictures; development of stories.

Geography: Local.

Arithmetic: Counting to 1,000; Arabic and number words; ordinals, a few; addition and subtraction to 100; mental and written.

Drawing: First principles.

Nature study.

FOURTH YEAR.

The ground covered is practically the language principles of Miss Sweet's Third Book; also careful attention to and frequent drill on the present-perfect tense.

Tone and rhythm.

Geography: Preparatory and local; manuscript lessons.

Nature study: Manuscript lessons.

History: Manuscript lessons.

Arithmetic: The four fundamental rules, with mechanical and language problems; Roman numbers to 100; ordinals to one-hundredth; reading numbers to 1.000; the use of the yardstick and foot rule; quart, pound, gallon, and other measurements.

FIFTH YEAR.

Tone and rhythm.

Except otherwise directed, hektograph books, prepared out of school, are all the textbooks required.

Language: The principles of Miss Sweet's Fourth Book, and a few idioms and expressions not found there; letters; journals; stories; description of persons, places, things, pictures.

Nature study: Manuscript lessons.

Vocabulary: Miss Sweet's Fourth Book and such verbs as come up in letters, descriptions, etc.

Geography: Weather; directions; climate; zones, form; use of the globe; Kansas and map of Kansas; globe and hemispheres; the United States. (Manuscript books and "First Lessons in Geography.")

History of the United States: Manuscript lessons about explorers, discoverers, adventurers, settlers, stories of colonial life, and persons and events of colonial period.

Arithmetic: Notation; Roman numbers to M; ordinals continued. Problems: Practical, involving four fundamental processes; language problems involving same processes. Drill for accuracy and rapidity. The words add, subtract, multiply, divide, addition, subtraction, multiplication, division, plus, minus, less, sum, remainder, amount, product, quotient, answer, minuend, subtrahend, multiplier, multiplicand, dividend, divisor, left, buy, sell, paid, received, got, etc.

Penmanship.

Drawing.

SIXTH YEAR.

Tone and rhythm.

During the year there is need of much review of the work covered during the previous years. Words, idioms and various forms of expression now come up more rapidly than during the earlier years.

The use of questions continues throughout the entire course—questions that bring out the language principles taught; general questions that enrich the pupil's interrogative forms; questions that tend toward closer thinking; questions that reveal the pupil's thought and conditions; questions that show a genuine interest in the welfare of the pupil.

The language taught in history, geography, etc., and in drill on forms or expression is valuable; but the most valuable language to the deaf is that which is ordinarily overlooked—the language used in commands, comments, criticisms, opinions, little pleasantries, and what may seen only random conversation. Every opportunity is sought for utilizing such expressions.

Hektograph books, prepared out of school, supplemented with Hoenshel's Grammar, are the textbooks in language.

The textbooks in geography and history are supplemented with hektograph work.

Geography: Elementary; industries and products; map drawing.

History: Montgomery's Beginners.

Arithmetic: Roman numbers and ordinals, continued. Problems: Mechanical and language. Units of measure. Prince's Book IV, to decimal fractions.

Letter-writing.

Drawing.

Child's Book of Health, by Blaisdell.

Nature study: Manuscript lessons.

SEVENTH YEAR.

Tone and rhythm.

The work in language is very similar to that of the sixth year, being in the main a review and extended use of principles mapped out for that year. Textbooks have a more prominent place; idioms are more frequent, and in every way there is a greater variety of expression.

Supplementary exercises: Countries and their inhabitants; indefinite nouns; nouns in apposition, etc.

The lessons in history, geography and other subjects furnish idiomatic expressions that can be used as lessons in language.

Words and Phrases, by W. G. Jenkins, the Handbook in Language for the Deaf, by Miss R. R. Harris, are excellent sources from which to obtain idioms.

Grammar: Hoenshel's.

History: United States; Montgomery's Beginners, and manuscript lessons covering periods of discovery and exploration, settlement and colonial life.

Geography: Elementary; map drawing.

Arithmetic: Review four fundamental rules and complete denominate numbers.

Physiology: Child's Book of Health, by Blaisdell.

Sunday-school work.

EIGHTH YEAR.

The vocabulary, to a large extent from textbooks, must be supplemented with exercises about the ordinary affairs of life, involving idioms and expressions not usually found in textbooks.

Hektograph books, letters, notes, conversations, descriptions, imaginative writing, reproduction, journals and questions must be freely used.

Proverbs.

History: American.

Geography: Elementary completed.

Physiology: Blaisdell's No. 11.

Civil government: Manuscript lessons.

Arithmetic: Review denominate numbers and finish common fractions.

Grammar: Hoenshel's.

Agriculture: Manuscript lessons.

NINTH YEAR.

Composition: Drill in writing compositions from outlines. Personal experiences; current news; imaginary journeys; imaginary conversations and subjunctive conditions (involving the use of the past and the past-perfect subjunctive tenses) have a place.

Reproduction: (1) Of written short stories and other exercises; (2) of similar exercises spelled on the fingers; (3) of longer stories read with a view to condensation.

Letters and notes: Of business; of friendship; of congratulation or condolence; of a varied nature, to persons of various stations in life or relation to the pupil; invitations; replies; acceptances, expressions of regret, etc.

Grammar: Hoenshel's.

Manners and morals.

History: Eggleston's Complete.

Geography: Werner's Grammar, School and Physical.

Arithmetic: White's, to percentage.

Physiology: Blaisdell's No. 11.

Civil government: Manuscript lessons.

Kansas history: Arnold.

Agriculture: Manuscript.

TENTH YEAR.

Language: Textbooks and supplementary exercises; exercises on direct and indirect quotations.

History: Montgomery's Leading Facts of American History.

Kansas history: Arnold.

Geography: Physical and political.

Arithmetic: Percentage, interest, discount, etc.

Physiology: Our Bodies and How We Live, completed.

Civil government: Continued.

Grammar: Longman's.

Proverbs.

Sunday-school work: *Illustrated Students' Quarterly; Young People's Weekly.*

ELEVENTH YEAR.

English literature.

History: American, completed.

English history: Higginson and Channing's English History for Americans.

Physics.

Grammar: Longman's School Grammar. Colloquial forms and idioms.

Arithmetic: Completed.

Algebra: Wentworth's School Algebra.

Civil government: In connection with history.

Sunday-school work: *Illustrated Student's Quarterly;* Bible History Stories; *Young People's Weekly.*

TWELFTH YEAR.

Language: The work in language for the twelfth year has for its objects: (1) Ability to understand the language of textbooks, newspapers, books, and general conversation. (2) The application of language principles learned in previous years. (3) The enlargement of the vocabulary through the acquisition of idioms, synonyms, antonyms, and other words. (4) Greater facility and variety in expression, and a desire for more learning.

English and grammar: Practice on business letters and notes; social notes; oral or finger-spelled conversation; interpreting paragraphs selected from school books and newspapers; abstracts of historical topics, narratives, descriptions, etc., and compositions on given subjects.

Reading: Books required by Gallaudet College.

Mathematics: Wentworth's School Algebra.

Physics: Completed.

Civil government: Taught in connection with history.

Geography: Reviewed in connection with current topics.

Sunday-school work: *Illustrated Student's Quarterly; Young People's Weekly;* Bible Study Union Lessons.

SHORTENING OF LAST SCHOOL TERM.

Owing to the excessive cost of maintenance, and also for the reason that some of our older boys and girls could be of material help on their home farms, it was deemed necessary to close our 1917-'18 school term three weeks earlier than usual. However, by holding regular school sessions on Saturdays, beginning after the midwinter holidays, we succeeded in covering our year's course of study, so the pupils' progress was not retarded and the plan worked no hardship on them in any way.

Deaf children, in control, in work, in pleasure, and in all things affecting their childhood, need no difference made between them and the other children of the family. So it is our constant aim to have our pupils take part in all activities common to hearing children.

Our school was the first in this county to enroll 100 percent in the Junior Red Cross.

Our girls maintain their own Red Cross surgical dressings unit, under the leadership of Miss Leslie Hoge.

Our boys, as part of their work, have made the packing-boxes used by the Johnson county Red Cross chapter.

We have taken active part in all local war activities, such as buying liberty bonds (as a state school), baby bonds, thrift stamps; supporting several French orphans; making surgical dressings and packing-boxes;

giving Red Cross benefit entertainments; participating in public drives and demonstrations, etc. The public has learned to depend on our hearty coöperation in any time of need.

Under the leadership of Coach Taylor, our companies of Boy Scouts are doing effective work in the teaching of patriotism to all the school.

Our baseball, football, and basket-ball teams continue to uphold their high standard in athletics.

Our girls, from the youngest to the oldest, are being exceptionally well trained in physical development, under the instruction of Miss Colie.

When we consider that the tendency of the deaf child is to grow up with less development of the lungs than hearing children, we can realize the vital importance of all gymnasium and athletic work.

Small girls dancing English Hornpipe for a lesson in rhythm.

APPLICATION FOR ADMISSION.

Following is a copy of the application for admission to the School for the Deaf:

RULES, INFORMATION, AND INSTRUCTIONS.

The School for the Deaf is located and maintained at Olathe, in Johnson county, in accordance with certain acts of the legislature, the same being compiled in sections 6966 to 6972, General Statutes of 1901, as modified by sections 3997 to 4005 and 6541 to 6544 and 6548 of said General Statutes, and chapter 384, Laws of 1905, and sections 1. 22 and other sections of chapter 475, Laws of 1905.

All deaf persons who have been residents of the state of Kansas six months, between the ages of seven and twenty-one years, inclusive, who are not incapacitated by physical, mental or moral infirmity for useful instruction, are eligible for admission as pupils of the School; but no one whose age does not come within the limits above prescribed shall be received or retained, except in peculiar cases. The School is strictly educational, and is not an asylum or home for the unfortunate or a hospital for the treatment of disease. The School does not have an aurist or ear specialist. Children of imbecile or unsound mind, or fixed immoral character, or confirmed ill health are not admitted to the School.

The School is intended to supplement the common schools of the state, so that no youth may be deprived of the advantages of gaining an education by reason of any defect of hearing, as well as the education of the totally deaf. It is the duty of the truancy officers to see that all the youth of Kansas who are eligible for admission are sent to the School. But persons are not eligible for admission unless their defect in hearing is such as to render them incapable of instruction in the common schools.

All applications for admission must be made to the Superintendent, except that pupils in good standing, who have been in attendance the previous year, need not make a new application. In all such cases the superintendent will send notices, the month previous to the opening of the School, to the former pupils, giving the date of the opening of the School and other information. In all other cases, no person will be admitted until notice has been given by the Board that such person can be received.

The school year commences the first part of September. On the opening day of the school term the superintendent or caretakers will meet all trains at Olathe, and at the beginning of vacation caretakers will be sent with pupils to distributing points on the railways.

All regular pupils are required to be present at the beginning of the fall term of school, and to remain during the full term, unless prevented by illness or some cause which, in the judgment of the superintendent, shall be sufficient for him to grant a leave of absence.

Children admitted to the School are under the care of the state, and no interference with plans devised for their education and welfare will be permitted.

Tuition, books, board and washing are furnished by the state, but parents or friends who are able and wish to do so may pay for the same. Clothing, traveling and incidental expenses must be furnished by parents or friends or by the county. If the parents or friends fail to do so, the county of the pupil's residence must furnish the same. In some cases the Board admits nonresidents, on such terms as the Board thinks just.

It is positively required that all pupils shall be taken from the School at the close of the school term, no pupils being kept at the School during the annual vacations.

In the religious and moral instruction of the pupils, no sectarian teaching or inculcation of partizan politics will be allowed. The pupils are required, however, to attend all services in chapel.

All letters and packages for pupils should be addressed in care of the School. All telegrams and express matter must be prepaid.

Persons bringing pupils to the School, or visiting them or teachers or employees, cannot be accommodated with board and lodging at the School during their stay in the city. All such can find ample accommodations in the immediate vicinity of the School.

Pupils may be suspended and returned to their homes by the superintendent, on the order of the Board, when, in the judgment of the Board, it is necessary to maintain discipline or promote the health or morals of the School.

The use of tobacco and intoxicants and all profanity or obscene language is strictly forbidden, and the violation of this rule is deemed sufficient cause for suspension or expulsion. Parents are requested to assist in breaking up these habits.

The utmost care should be taken to obtain complete and correct answers to the accompanying questions. After all the requirements have been complied with, mail the application to Mrs. Kate S. Herman, Supt. School for the Deaf, Olathe, Kan., who will in due time notify you of its acceptance or rejection. The clothing list will accompany the notice of acceptance. By carefully reading until the above rules and instructions are thoroughly understood, then complying with every requirement, much time and postage will be saved.

APPLICATION OF PARENT OR GUARDIAN.

I hereby make application for the admission of .... to the School for the Deaf, at Olathe, Kan.; and, if admitted, he or she will be permitted to remain at the School during the full term, unless prevented by illness or some cause which in the judgment of the superintendent shall be sufficient for him to grant a leave of absence, or until suspended under the rules and regulations of the School.

(Signed)..

(Parent or guardian.)

Post office..., ...County, Kansas.

VERIFICATION AS TO RESIDENCE.

State of Kansas, County of..ss.

I hereby certify that I am the parent or guardian of.. and that the answers to the following questions are true. So help me God.

(1) Where was the person (child) born?..

(2) When did ....he become a resident of the state of Kansas?..

(3) When did ....he become a resident of the county?..

(4) If not a legal resident, on what ground is the application based?..

(Signed)..

Subscribed and Sworn to before me, this............day of..............................A. D. 191....

....

[Seal.] *Notary Public.*

(My commission expires..............................A. D. 19....)

CHILD'S PERSONAL AND FAMILY HISTORY.

1. What is the child's full name?..
2. When born? (Give year, month, and day)..
3. Was the child born deaf? If not, at what age was hearing lost?..
4. What caused deafness?..
5. Is the child totally or partially deaf? What noises can the child hear?..
6. To what extent can the child hear the sound of the voice?..
7. Have efforts been made to cure deafness? If so, in what way and with what results? ....
8. Can the child understand anything by reading from the lips of persons speaking? (Give example.) ....
9. Can the child utter any intelligible words? (Give example.)..
10. Does the child communicate intelligibly, by signs or otherwise, with members of its family and friends?..
11. What have been the general conduct and disposition of the child?..
12. What is the state of the child's health in general?..
13. What is the condition of the child's eyesight?..
14. Is the child free from fits, from scrofulous ulcerations, and from every symptom of acute, chronic or cutaneous diseases?..
15. Is the child afflicted with contagious, infectious or loathesome disease?..
16. Has the child had the smallpox?................ Scarlet fever?................ Mumps?................ Whooping-cough?................ Measles?................ What other diseases?..
17. Is the child of sound mind and susceptible of intellectual culture?..
18. Has the child been vaccinated?..
19. Does the child wash and dress and care for itself?..
20. Is the child colored or white?..
21. Has the child been under instruction at any time? If so, where, and how long?..
22. Can the child read or write?..
23. Has the child learned to perform any manual labor or ever been usefully employed? ....
24. Does the child live with its parents? If not, state with whom it lives, where and how it is maintained, and who will be responsible for it during vacation, or when sent home? ....
25. Give the father's full name..
26. Give the mother's name before marriage..
27. Where do child's parents reside? (Give county, township, and post office.)..
28. Nearest railway station; on what road?..
29. Where was the father born?..
30. Where was the mother born?..
31. Is either of the parents deaf?..
32. If yes, was he or she born so, or at what age or from what cause did the deafness come, and in what degree is the parent deaf?..
33. Were the father and mother cousins, or related in any degree?..
34. What are the parent's occupations?..
35. Has either parent any deaf relations, and, if any, what? (Give names.)..
36. How many children have the parents had?..

37. Name those born deaf..

38. Name those who have become deaf, giving cause of deafness, and age at which deafness occurred ....

39. What are the names of the town, county and state in which the child has a legal residence? ....

REMARKS: ....

I HEREBY CERTIFY that I have known the child to whom the above history refers for ....years, and that the foregoing answers are true, to the best of my knowledge and belief, or were ascertained by me by a personal examination of the child, and by inquiry of relatives and others familiar with the case, and are true, so far as I am able to determine.

(Signed)..
Residence..

SUBSCRIBED AND SWORN TO before me, this..............day of..............................191.....
(Seal.) ....
Notary Public.

My commission expires..............................A. D. 19.......

IMPERATIVE NEEDS FOR 1918-1920.

To meet the great advance in all supplies for maintenance and to cover the cost of special items, an increase of 100 percent of our present maintenance fund will be needed for the ensuing biennium.

Also the situation respecting the cost of living necessities of every kind sustains our recommendation for a general increase in salaries and wages; positions should be made financially attractive enough to retain competent people. As we insist on the highest standards on the part of our staff, we should be prepared to pay according to the ruling scale for best service. To do this we must have an increase of 20 percent over our present salaries and wages fund.

ITEMS NEEDING SPECIAL APPROPRIATIONS.

	Estimated cost.
Refrigerating plant	$2,500.00
Roof on part of main building, 5,280 sq. ft., at $16 per sq.	844.80
Cement floors leading to boys' and girls' play rooms (must be reinforced), 2,220 sq. ft.	1,000.00
Sidewalks, 5,500 sq. ft.	1,000.00
Metal ceilings, 3,438 sq. ft., at $16 per sq.	550.00
Mixing machine for bakery	450.00
Special appropriation for coal (per year)	8,000.00
Force draft for engine room	2,000.00
Office safe	500.00
	$16,844.80

In closing may I assure you of the continued earnest spirit in which the officers of the school have carried on the work entrusted to them and of my personal appreciation of the encouraging support and freedom in work given by the Board. Respectfully submitted.

KATE S. HERMAN, *Superintendent.*

PHYSICIAN'S REPORT.

To Mrs. Kate S. Herman, Superintendent, State School for the Deaf:

I have the honor to report to you the work of the past two years as medical attendant at your institution. We have endeavored to prevent the occurrence of disease in the School by such measures as will make the sanitary surroundings the very best possible. As an instance of this, on the opening of the School in September, 1916, we had a few cases showing symptoms of a typhoid nature, and an investigation was made as to the water supply, and all sewer connections about the buildings. We found one child, a girl fourteen years of age, who seemed to be infected on her arrival at the School. Immediate inquiry was made as to her home surroundings, and it was found that at her home in Crawford county they were having an epidemic of typhoid fever, there being two cases in her own family. She was returned to her home, and report made to the health board there. Investigation was carried on further, and samples of the water used about the buildings were sent to the State University for analysis, the finding showing polluted water from sewer gas and vegetable matter. All water was ordered boiled for thirty days and weekly tests of water were made; all leaks in sewer pipes were repaired, and I am pleased to inform you that we have not had one case of typhoid fever at the School for the past two years.

At the opening of each term of school we have since advised thorough fumigation of clothing brought by pupils, unless the appearance of said clothing shows it to have been recently washed and ironed, so as to know that it is thoroughly sterile and sanitary. Now, as attention has been called to the dangers arising from pupils visiting their homes during the holidays, it becomes imperative that the same precautions be observed upon their return to school as at the beginning of the session. This requirement I am pleased to say has been complied with, with due diligence, but in spite of all precautions we had a case of scarlet fever develop last winter, the second day after the child came from her home in Topeka, and in tracing this case back we found that there had been eruptive disease in the family from which this child came, and later on a death was reported from this family. We were fortunate in limiting the cases arising from this one to nine, and they were found in the dormitory occupied by this child, thus showing the vigilance with which all attendants and nurses watched for symptoms of further cases.

I might name numerous cases of like prevention of violent epidemics, which I am sure there would have been had these measures not been persevered in.

SYNOPSIS.

As a further summary of cases treated, I beg leave, for your information, to submit the following:

CASES, 1916-'17.

Typhoid fever	1
Croup	4
Pneumonia	12
Bronchitis	26
Otitis media (with supperation)	5
Appendicitis	1
Broken arms and dislocations	7
Diseases of the digestive organs	10
Smallpox (traced from outside infection)	6
Measles	11
Scarlet fever	7
Whooping cough	3
Cases treated for minor complaints and for preventive means	538
Visits made at the School in daytime	241
Visits made at the School at night	11

CASES, 1917-'18.

Croup	7
Tonsilitis	9
Tonsilitis (removal of tonsils and adenoids)	2
Pneumonia (bronchial)	17
Pneumonia (lobar)	9
Bronchitis	18
Otitis media (with supperation)	8
Otitis media (without supperation)	6
Appendicitis	1
Broken bones and dislocations	9
Diseases of the digestive organs	11
Measles	5
Meningitis	1
Rothelin (liberty measles)	63
Scarlet fever	8
Smallpox (discreet)	3
Whooping cough	4
Cases treated for minor complaints, not requiring bedside visits	138
Cases referred to parents for operation for diseased tonsils and adenoids	60
Total visits made during term for inspection and attendance the sick, night and day	213

EXPLANATORY.

At the time the epidemics of spinal meningitis were prevalent at the various soldier training camps over the country, evidently some of our pupils came in contact with one of these carriers, and we had several that showed symptoms of this infection. One case, Fred Allen, being a neurotic, and with a highly infectious nose and throat, died from this disease. Four others from his dormitory showed decided symptoms for two days, but no further cases developed. There were no other deaths in the institution during the past two years. F. P. Hatfield, M. D.

COMMENCEMENT, JUNE 7, 1917.

GRADUATES.

Henry Orr Hoss	Dodge City.
Helen May Martin	Mount Hope.
Ruth Agnes Paxton	Blaine.
Florence Eva Phalp	Kansas City.
George Dewey Stewart	Pittsburg.

Colors: Red, White and Blue.
Flower: Carnation.
Motto: "Do Thy Bit."

BACCALAUREATE SERMON ....Rev. A. B. Appleby, Sunday June 3, 2:30 p. m.

PROGRAM.

Music	Mrs. May Buxton Hallett.
Invocation	Dr. A. B. Appleby.
Salutatory, and Essay, "Autocracy *vs.* Democracy"	Henry O. Hoss.
Maypole Dance	Little Girls.
Class Exercise, conducted by Miss Worley	Young Children.
Essay, "The Emblem of Mercy"	Florence E. Phalp.
Sword Drill	Older Girls.
Song	Thelma Decker and Mrs. Geo. Snyder.
Folk Dance, "Highland Fling"	Pauline Conwell.
Essay, "The Making of an American," and Valedictory	George D. Stewart.
Boy Scout Drill	Intermediate Boys.
Address to Graduates	Rev. S. F. Reipma.
Song, "America"	By the Class.
Presentation of Bibles and Diplomas	Mrs. Cora G. Lewis.
Benediction	Dr. A. B. Appleby.

COMMENCEMENT, MAY 7, 1918.

GRADUATES.

Lila Mae Buster	Kansas City.
James Irvin Davis	Liberty.
Lena Druit	Mineral.
Nathan Lahn	Wichita.
George Jacob Steinhauer	Leavenworth.
Cecile Mae Tucker	Abilene.
Joseph Anton Weber	Liebenthal.
Daniel Waite Vaughan	Olathe.

Colors: Allies' Colors.
Flower: Carnation.
Motto: "Carry On."

BACCALAUREATE SERMON . . . . Rev. Sears F. Reipma, Sunday, May 5, 3 p. m.

PROGRAM.

Music	Miss Florence Loar.
Invocation	Rev. Sears F. Reipma.
Essay, "Zion," and Salutatory	Nathan Lahn.
Song, "America, My Country"	Senior Class.
Demonstration of Work of Beginners	Miss Worley's Class.
Essay, "The Supreme Genius"	Daniel Waite Vaughan.
Pizzicati Polka	Pauline Conwell.
Drill	Boy Scouts.
Essay, "The Woes of Erin," with Valedictory	James Irvin Davis.
Address to Graduates	Hon. Wilbur N. Mason.
Presentation of Bibles and Diplomas	Hon. E. W. Hoch.
Patriotic Pageant	Girls.
Song, "America"	Senior Class.
Benediction	Rev. Sears F. Reipma.

LIST OF PUPILS IN ATTENDANCE.

Term 1916-'17, 244 pupils; term 1917-'18, 223 pupils.

NAME.	Town.	County.	Cause of deafness.
Abbott, Mable	Fort Scott	Bourbon	———
Adams, Godfrey	Olathe	Johnson	Spinal meningitis.
Allen, Joe	Kansas City	Wyandotte	Congenital.
Allen, Fred	Kansas City	Wyandotte	Congenital.
Allen, Ethel	Zurich	Rooks	———
Allison, Leslie	Seneca	Nemeha	Congenital.
Astle, Percy	Haven	Reno	———
Bacon, Joseph E.	Topeka	Shawnee	Cold.
Baldwin, Ora	Dearing	Montogmery	———
*Ball, Edith	Scammon	Cherokee	La grippe.
Ball, Mary	Lebo	Coffey	Congenital.
Bantam, Harold	Almena	Norton	Congenital.
Basham, George	Kansas City	Wyandotte	Typhoid and meningitis.
Barrett, Florice	Olathe	Johnson	———
Bates, Virgil	Chetopa	Labette	Gathering in head.
*Bechdoldt, Julia		Cherokee	Catarrh.
Benedet, Mario	Pittsburg	Crawford	Spinal meningitis.
Benedet, Olga	Pittsburg	Crawford	Spinal meningitis.
*Blaine, Harold	Kansas City	Wyandotte	———
Blake, Alvin	Elk Falls	Elk	Congenital.
Bostick, Bessie	Olathe	Johnson	———
Brantley, Fred	Hutchinson	Reno	Congenital.
Bridwell, Victoria	Atchison	Atchison	Congenital.
*Brouhard, Raymond	Norton	Norton	Congenital.
Brown, Clementine	Bronson	Allen	Congenital.
Brown, Sarah	Bronson	Allen	Congenital.
*Brown, Kearney	Bronson	Allen	Scarlet fever.
Brown, Lloyd	Olathe	Johnson	Congenital.
Brubaker, Wilbur	Olathe	Johnson	Scarlet feaver.
Buchanan, James	Leavenworth	Leavenworth	La grippe.
Burton, Etta		Republic	Measles.
Buselt, Louis	Leavenworth	Leavenworth	Fall.
Buster, Kathryn	Kansas City	Wyandotte	Congenital.
Buster, Lila	Kansas City	Wyandotte	Congenital.
*Calkins, Oren	Galena	Cherokee	Scarlet feaver.
Call, Leona	Achilles	Rawlins.	Spinal meningitis.
Carney, Thelma	Galena	Cherokee	Measles.
Carpenter, Pearl	Greenleaf	Washington	Membranous croup.
Carrier, Albert	Altoona	Wilson	Congenital.
Carrier, Paul	Altoona	Wilson	Congenital.
*Carrier, James	Altoona	Wilson	Scarlet feaver.
Carrier, Irene	Altoona	Wilson	———
Carter, Charles	Lawrence	Douglas	———
Carter, Viola	Sharon	Barber	Catarrh.
*Chase, Lena	Rosedale	Wyandotte	La grippe.
Clark, Ralph	Garnett	Anderson	Adenoids.
Cline, Walter	Fredonia	Wilson	Congenital.
Clinesmith, Lynn	Centerville	Lynn	———
*Collier, Harold	Kansas City	Wyandotte	Spinal meningitis.
Conwell, Pauline	Potwin	Reno	Fever.
Conyers, Ethel	Toronto	Woodson	Congenital.
Corbett, Louise	Hanover	Washington	Earache.
*Cornett, Samuel	Independence	Montgomery	Tonsilitis.
Couch, Garold	Scammon	Cherokee	———
*Cox, Floyd	Chanute	Neosho	Rheumatism.
Crosby, Agnes	St. John	Stafford	La grippe.
Crosby, Willard	St. John	Stafford	Congenital.
Crum, Jessie	Chanute	Neosho	Congenital.
Dale, Billie	Neodesha	Wilson	Spinal meningitis.
Dailey, Ray	La Crosse	Rush	———
Danner, Willie	Olathe	Johnson	———
Davis, Irvin	Liberty	Montgomery	Congenital.
Decker, Thelma	Topeka	Shawnee	Adenoids.
*Dent, Bernice	Sawyer	Pratt	Congenital.
Dinkel, John	St. Peter	Graham	Whooping cough.
Doctor, Frank	Olathe	Johnson	Scarlet fever.
Dohrman, Matilda	Great Bend	Barton	Congenital.
Downing, Orpha	Moscow	Stevens	Congenital.
Druit, Lena	East Mineral	Cherokee	Congenital.

LIST OF PUPILS IN ATTENDANCE—CONTINUED.

NAME.	Town.	County.	Cause of deafness.
Duncan, Ula	Garland	Bourbon	Congenital.
Dunn, Dorothy	Topeka	Shawnee	Measles.
*Durbin, Ethel	Kansas City	Wyandotte	Congenital.
*Durfey, Nellie	Olathe	Johnson	Congenital.
Elwick, Ersle	Abilene	Dickinson	Congenital.
Evans, Harold	Mulberry	Crawford	Congenital.
Fahringer, Victor	Concordia	Cloud	Adenoids.
Ferguson, Stanley	Olathe	Johnson	Mumps.
Finney, Helen	Beloit	Mitchell	Congenital.
*Foreman, Dorothy	Mankato	Jewell	Scarlet fever.
Fuller, Mamie	Wichita	Sedgwick	———
Green, Essie	Gross	Crawford	Smallpox.
Haber, Chas	Olathe	Johnson	———
Haeberle, Ellsworth	Rosedale	Wyandotte	Spinal meningitis.
Haden, Julia	Norcatur	Decatur	Congenital.
Hanis, Andrew	Kansas City	Wyandotte	Spinal meningitis.
Harris, Theora	Topeka	Shawnee	Adenoids.
Hasty, Ernest	Garnett	Anderson	Spinal meningitis.
Hawkins, Uluah	Palco	Rooks	Congenital.
Heinrichs, Chester	Burrton	Harvey	Adenoids and meningitis.
Helmick, Kenneth	Le Roy	Coffey	———
Higginbotham, James	Moline	Elk	Scarlet fever.
Hilderman, Victor	Rushcenter	Rush	Congenital.
*Hite, Irl	Arkansas City	Cowley	Gathering in head.
Honeyman, Lillian	Kansas City	Wyandotte	Spinal meningitis.
*Hoss, Orr	Fort Dodge	Ford	Spinal meningitis.
Howard, Lillie	Havensville	Jackson	Congenital.
*Hoyt, Mary	Coffeyville	Montgomery	Congenital.
Huddleston, Neal	Axtell	Marshall	Congenital.
Huggerth, Clara	Concordia	Cloud	Fall.
*Hughes, Bertha	Belle Plaine	Sumner	Congenital.
*Hughers, Maud	Belle Plaine	Sumner	Congenital.
*Hunt, Nola	Kingman	Kingman	Catarrh.
Huffman, Harley	Burdett	Pawnee	———
Inman, Edna	Chanute	Neosho	Fall.
Jackson, Earl	Independence	Montgomery	Congenital.
*Jackson, Robert	Columbus	Cherokee	Sickness.
Jendritz, Stanley	Pittsburg	Crawford	Sickness.
Jessup, Harold	Hoisington	Barton	Spinal meningitis.
Johnson, Clarence	Emmett	Pottawatomie	Gathering in head.
Johnson, Wilma	Olathe	Johnson	———
Jordon, Fred	Leavenworth	Leavenworth	Spinal meningitis.
Judd, Maurine	Melvern	Osage	Sickness.
*Kaniper, Hazel	Marion	Marion	Spinal meningitis.
Keegan, Clete	Olathe	Johnson	Scarlet fever.
Kelly, Anna	Emmett	Pottawatomie	Measles.
Kistler, Walter	Manhattan	Riley	Fall.
Koehne, Otis	Montezuma	Gray	———
Kreisel, David	Cassoday	Butler	———
Kriley, Sarah	Stockton	Rooks	Cold.
Kroh, Deloris	Junction City	Geary	Mumps.
Langdale, Earl	Olathe	Johnson	Spinal meningitis.
Lahn, Nathan	Wichita	Sedgwick	Fall.
Lamm, Jesse	Alton	Osborne	Congenital.
Lamm, Sealey	Alton	Osborne	Congenital.
Lannan, Francis	Topeka	Shawnee	Sickness.
Lehman, Jesse	Olathe	Johnson	Diphtheria.
Lewis, Forest		Washington	Congenital.
Liebbrandt, Gotlieb	St. Francis	Cheyenne	Sickness.
Lindsey, Loren	Topeka	Shawnee	Congenital.
Lines, Howard	Neodesha	Wilson	Gathering in head.
Lohrengel, Ethel	Salina	Saline	———
Longnickel, Karl	Kansas City	Wyandotte	Congenital.
Loughbon, Iva	Pittsburg	Crawford	Measels.
McCrary, Nora	Pittsburg	Crawford	Congenital.
McDonald, Leah	Concordia	Cloud	———
McGrew, Joe	Farmington	Atchison	———
McJunkin, Lillie	Syracuse	Hamilton	Inflammation in head.
McKay, Dora	Arma	Crawford	Typhoid pneumonia.
McKinley, May	Silver Lake	Shawnee	Measles.
Mallatt, Avis	Arkansas City	Cowley	———
Malm, Joe	Abilene	Dickinson	———
Maloney, Joseph	Strong City	Chase	———
Marra, Wm.	Kansas City	Wyandotte	Spinal meningitis.
Martin, Edith	Caney	Montgomery	Chickenpox.
Martin, Frank	Hutchinson	Reno	———
*Martin, Helen	Mount Hope	Sedgwick	Gathering in head.
Mason, Forest	Corbin	Sumner	Fall.

LIST OF PUPILS IN ATTENDANCE—CONTINUED.

NAME.	Town.	County.	Cause of deafness.
*Mattox, Carl	Seneca	Nemaha	Spinal meningitis.
Mauser, Mary	Girard	Crawford	Fever.
Mays, Charlotte	Coffeyville	Montgomery	Gathering in head.
Metcalf, Chas.	Richland	Douglas	———
Metsker, Dale	Olathe	Johnson	Inflammatory fever.
Meyer, Claude	Centralia	Nemaha	Born partially deaf.
Meyer, Ida	Topeka	Shawnee	Catarrh.
Miller, Lloyd	Abilene	Dickinson	La grippe.
Morley, Mary	Highland	Doniphan	Congenital.
Morand, Clyde	Wakarusa	Shawnee	———
Ocamb, Izetta	Kansas City	Wyandotte	Spinal meningitis.
Olson, Chas	Manhattan	Riley	Abscesses.
Owens, Margaret	Delia	Jackson	Spinal meningitis.
Ozbun, Edyth	Pittsburg	Crawford	Congenital.
Ozbun, Robert	Pittsburg	Crawford	Croup and diphtheria.
Pankratz, Stella	Lehigh	Marion	Earache and whooping cough.
Parker, Chas	Fort Scott	Bourbon	———
*Parrish, Alex.	Leavenworth	Leavenworth	Spinal meningitis.
Patton, Edna	Cedar Point	Chase	Injured at birth.
Paxton, Joe	Blaine	Pottawatomie	———
*Paxton, Ruth	Blaine	Pottawatomie	———
*Peasley, Lula	Atchison	Atchison	Brain fever.
Peck, Dorothy	Kansas City	Wyandotte	Congenital.
*Pepperd, Merrill	Coldwater	Comanche	Congenital.
Peters, Arthur	Herington	Dickinson	Congenital.
Petry, Oscar	Olathe	Johnson	Catarrhal fever.
*Phalp, Florence	Kansas City	Wyandotte	Spinal meningitis.
Phillips, Justin	Wichita	Sedgwick	Mastoid abscesses.
Powers, Evart	Gridley	Coffey	———
Price, Harold	Kansas City	Wyandotte	———
Pritner, Ward	Hartford	Lyon	Mumps.
Puett, Ray	Topeka	Shawnee	Gathering in ear.
Ream, Margaret	Kansas City	Wyandotte	Spinal meningitis.
*Remington, Marcia	Chetopa	Labette	Catarrh.
*Ricketts, Emert	Fort Scott	Bourbon	Pneumonia fever.
Rines, Fred	Paradise	Russell	Fever.
Ringle, Bessie	Cherryvale	Montgomery	Explosion.
Ringle, Lizzie	Cherryvale	Montgomery	Whooping cough.
Ringle, John	Cherryvale	Montgomery	Gathering in ear.
Rininger, Lillie	Olathe	Johnson	———
Robson, Daphine	Pittsburg	Crawford	Brain meningitis.
*Robson, Louis	Topeka	Shawnee	———
Rowden, Viola	Johnson	Stevens	Congenital.
Reynolds, Billy	Parsons	Labette	———
*Savidge, Thomas	Ottawa	Franklin	Typhoid fever.
Schepmann, Ruth	Ellis	Ellis	Congenital.
Schmidt, Lawrence	Tampa	Marion	Whooping cough.
*Schwede, George	Hutchinson	Reno	Congenital.
Scott, Lee	Olathe	Johnson	Meningitis.
*Sexton, Tony	Kansas City	Wyandotte	Typhoid and meningitis.
Shannon, Lenore	Centropolis	Franklin	Pneumonia fever.
Shelton, Cecil	Horton	Brown	Brain fever and meningitis.
Sherman, Arthur	Wichita	Sedgwick	Mastoid abscesses.
Siefert, Ray	El Dorado	Butler	Pistol shot.
*Simmerman, Nate	Topeka	Shawnee	Scarlet fever.
Sizer, Chas.	Olathe	Johnson	Congenital.
Sizer, Oscar	Olathe	Johnson	Congenital.
*Smith, Delia	Parsons	Neosho	Typhoid fever.
Smith, Julia	Olathe	Johnson	———
Smith, Orlin	Russell	Russell	Congenital.
Sperry, Harold	Cherryvale	Montgomery	Congenital.
Surlock, Vernon	Galena	Cherokee	———
Sparkey, Ernest.	Neodesha	Wilson	Measles.
Steinhauer, Geo	Leavenworth	Leavenworth	Congenital.
Stenzel, Esther	Marion	Marion	———
*Stewart, George	Pittsburg	Crawford	Spinal meningitis.
Stoneking, Fred	Independence	Montgomery	———
*Stucky, Henry	Murdock	Kingman	Scarlet fever.
Sloop, Lillian	Lyndon	Osage	Poor circulation.
Snyder, Vernon	Kansas City	Wyandotte	Gathering in head.
Taylor, Charlene	Meriam	Johnson	Fever.
Tompkin, John	Byers	Pratt	Congenital.
Tucker, Cecil	Abilene	Dickinson	Congenital.
Tulip, George	Scammon	Cherokee	Cold.
Tweedell, Opal	Holliday	Johnson	Spinal meningitis.
*Van Hoozer, Elsie	Yates Center	Woodson	Fever.
Vaughn, Waite	Olathe	Johnson	Injured at birth.
Wainscott, Russell	Clearwater	Sedgwick	Pneumonia.

LIST OF PUPILS IN ATTENDANCE—CONCLUDED.

NAME.	Town.	County.	Cause of deafness.
Wall, Hubert	Rosedale	Wyandotte	Scarlet fever.
Weaver, Myrtle	Minneapolis	Ottawa	Paralysis.
*Weber, Ida	Coffeyville	Montgomery	Measles and whooping cough.
*Weber, August	Liebenthal	Rush	Congenital.
Weber, Joe	Liebenthal	Rush	Congenital.
Weber, Vincent	Liebenthal	Rush	Congenital.
Wendell, Lucien	Niles	Ottawa	Adenoids.
Wendt, Joe	Enterprise	Dickinson	———
*Wendt, Otto	Enterprise	Dickinson	———
*White, George	Olathe	Johnson	Pneumonia.
Wickstrum, Alvin	Stockdale	Riley	———
Willey, Lula	Pittsburg	Crawford	———
Williams, Fountain	Rosedale	Wyandotte	Sickness.
*Winters, Everett	Baldwin	Douglas	———
Wimp, Everett	Olathe	Johnson	Congenital.
Wolken, Henry	Garnett	Anderson	Congenital.
*Wolverton, Jeanette	Holton	Jackson	Typhoid and measles.
Wortman, Ruth	Fort Scott	Bourbon	Spinal meningitis.
Wrench, Susie	Weir	Cherokee	———

*Did not return for 1917-'18.

NEW PUPILS ENROLLED, 1916-'17.

NAME.	Town.	County.	Cause of deafness.
Bates, Virgil	Chetopa	Labette	Gathering in head.
Benedet, Mario	Pittsburg	Crawford	Spinal meningitis.
Benedet, Olga	Pittsburg	Crawford	Spinal meningitis.
Bridwell, Victoria	Atchison	Atchison	Congenital.
Brouhard, Raymond	Norton	Norton	Congenital.
Burton, Etta	Chester, Neb	Republic	Measles.
Foreman, Dorothy	Gretna	Phillips	Scarlet feaver.
Koehn, Otis	Montezuma	Gray	————
Jendritz, Stanley	Pittsburg	Crawford	Congenital.
Loughbon, Iva	Pittsburg	Crawford	Congenital.
Maloney, Joseph	Strong City	Chase	Sickness.
Meyer, Claude	Centralia	Nemaha	Born partially deaf.
McKinley, May	Silver Lake	Shawnee	Measles.
Peck, Dorothy	Kansas City	Wyandotte	Congential.
Savidge, Thomas	Ottawa	Franklin	Fever.
Shelton, Cecil	Horton	Brown	Brain fever and spinal meningitis.
Smith, Orlin	Russell	Russell	Congenital.
Tompkins, John	Byers	Pratt	Congenital.
Wall, Hubert	Rosedale	Wyandotte	Congenital.
Weaver, Myrtle	Minneapolis	Ottawa	Paralysis.
Wolverton, Jeanette	Holton	Jackson	Typhoid fever and measles.

NEW PUPILS ENROLLED, 1917-'18.

NAME.	Town.	County.	Cause of deafness.
Abram, Leon	Kansas City	Wyandotte	Fall.
Andrews, Emmett	Glade	Rooks	La grippe.
Andrews, Ina	Glade	Rooks	Adenoids.
Camp, Moyne	Manchester	Dickinson	Treatments for scrofula.
Chapman, Bertha	Kansas City	Wyandotte	Spinal meningitis.
Druit, Virginia	East Mineral	Cherokee	Congenital.
Ernst, Joe	Kansas City	Wyandotte	Earache.
Gardner, Julian	Coffeyville	Ford	Spinal meningitis.
Hall, Viola	Solomon	Dickinson	Pneumonia.
Hottle, Victor	Parsons	Labette	Catarrh.
Jones, Elsie	Atchison	Atchison	Measles.
Kinnard, Arthur	Kansas City	Wyandotte	Scarlet fever.
Koehne, May	Montezuma	Gray	Congenital.
La Rosh, Vera	Deerfield	Kearny	Congenital.
Lester, Alice	Kansas City	Wyandotte	Congenital.
Lucas, Martin	El Dorado	Butler	Congenital.
Miller, John	Parsons	Labette	Spinal meningitis.
Miller, Ray	Neodesha	Wilson	Congenital.
Morris, Eva	St. George	Pottawatomie	Earache.
Rima, Ruby Lucile	Edgerton	Johnson	Congenital.
Seider, Esther	Kansas City	Wyandotte	Spinal meningitis.
Snow, Ray	Hiatville	Crawford	Scarlet fever.
Symmes, Harry	Topeka	Shawnee	————
Thompson, Lily	McPherson	McPherson	Accident.
Van Riper, Vernis	Brown Spur	Kingman	Infantile paralysis.
Wrench, Arthur	Weir	Cherokee	Congenital.

GRADUATES.

NAME.	County admitted from.	Occupation and present address.
1884.		
*Ann G. Gragg	Shawnee	Maried John Thumser.
Wilhelmina Metz	Leavenworth	Married Chas. Gilland, Towanda, Okla.
*Michael Smith	Franklin	Printer.
Samuel S. Waters	Saline	Orange grove employee, Potterville, Calif.
1886.		
*Laura M. Clark	Elk	————
*John F. Clark	Linn	Printer.
Alma Moore	Montgomery	Married Mr. Osborne, ————, Ohio.
Edward Ringle	Montgomery	Smelter employe, Deering, Kan.
Frank Shafer	Sedgwick	————, Ark.
Henry G. Sickel	Leavenworth	Traveling salesman, Leavenworth, Kan.
Charles Topf	Leavenworth	————
Ansel Williams	Crawford	Instructor, cabinet making, Fulton, Mo.
Ida M. Williams	Crawford	Married B. O. Sprague, Reynoldsburg, Ohio.
1888.		
Cora C. French	Smith	Married Monroe Nelson, Medford, Okla.
Ida A. Shimer	Comanche	Married Murdock McRae, ————, Okla.
1889.		
*Leonard Bowers	Johnson	Shoemaker.
Frederick D. Ellmaker	Marshall	Miller, Rosedale, Kan.
Monroe Ingram	Montgomery	Teacher, Taft, Okla.
Margaret Morrow	Montgomery	Married Mr. Lolmaugh, ————, Cal.
Daniel Sullivan	Dickinson	Landlord, Salina, Kan.
Wm. M. Sullivan	Johnson	Farmer, Okla.
A. Maud Thomas	Wyandotte	Married Tracy Elder, Kansas City, Mo.
1890.		
Homer H. Albright	Reno	Furniture factory employee, Wichita, Kan.
Joseph H. Burkhead	Gove	Farmer, ————, Iowa.
*Harvey A. Knauss	Rice	Cabinet maker.
Louella Stiffer	Marshall	Married Alfred Kent, Denver, Colo.
1892.		
G. Walfrid Anderson	Morris	Printer, Kansas City, Mo.
Eva A. Berglund	Marshall	Married Milo Seeley, Tacoma, Wash.
S. Estella Bodley	Johnson	Married Joseph Boston, Chehalis, Wash.
Cora B. Cotterman	Cowley	Married U. G. Miller, Lebo, Kan.
Alfred L. Kent	Douglas	Printer, Denver, Colo.
Paul Mark	Pottawatomie	Shoemaker, Ogden, Utah.
Fannie Taylor	Jefferson	Married Omar Harshman, Topeka, Kan.
1894.		
Edward J. Hansmann	Miami	Packinghouse employee, Kansas City, Kan.
Bruce Hewett	Jackson	Shoemaker, Holton, Kan.
Anthony Jennings	Edwards	Farmer, St. Joseph, Mo.
Katherine R. Meldrum	Neosho	Teacher, alma mater, Olathe, Kan.
A. Grace Mulligan	Atchison	Married Logan Nosh, Lincoln, Neb.
Margaret M. Naughton	Coffey	Married E. H. McIlvain, teacher, Olathe, Kan.
1895.		
Frederick D. Allen	Osage	Printer, ————, Ill.
William M. Calleghan	Montgomery	Butcher, Coffeyville, Kan.
Sallie Curry	Jefferson	Married Pearl Parker, Winchester, Kan.
Clara V. Eddy	Ottawa	Married Charles Martin, Menan, Idaho.
Nellie J. Pistole	Johnson	Married George Humpal, Kansas City, Mo.
Clara B. Pope	Pottawatomie	————
Alvin T. Spurry	Crawford	Farmer, ————, Ind.
Luther H. Taylor	Jefferson	Professional baseball player, also supervisor and physical director at alma mater, Olathe, Kan.
William E. Wait	Reno	Retired farmer, Kingman, Kan.
1897.		
John T. Bodley	Johnson	Baker, Centralia, Wash.
George H. Denton	Marshall	Farmer, ————, Kan.
Alexander Dreyer	Shawnee	Barber, Topeka, Kan.
Harrison G. Hower	Ottawa	Baker, Olathe, Kan.
Mable A. Mathews	Brown	Married Anthony Jennings, St. Joseph, Mo.
Jessie McQuiddy	Harvey	Married Alex. Dreyer, Topeka, Kan.

GRADUATES—CONTINUED.

NAME.	County admitted from.	Occupation and present address.
1898.		
Ida M. Denton	Marshall	Married Peter Hughes, Fulton, Mo.
Ora V. Shimer	Comanche	Farmer, ————, Okla.
1899.		
Eddie Blevins	Linn	Shoemaker, St. Louis, Mo.
Ella M. Blevins	Linn	Married Wharton Bennett, St. Louis, Mo.
Edith Brummitt	Shawnee	Married M. S. Hayes, Sulphur, Okla.
Chas. E. Clark	Linn	Barber, Mound City, Kan.
Amiel W. Fryhofer	Riley	Farmer, Randolph, Kan.
Morris S. Hayes	Douglas	Teacher, Sulphur, Okla.
William Hoppe	Shawnee	Shoemaker, Emporia, Kan.
Emma Raney	Bourbon	Married John Naughton, Meekton, Colo.
Arthur L. Roberts	Cherokee	Principal Kendall Green, Washington, D. C.
Emmette W. Simpson	McPherson	Farmer and stock raiser, Springfield, Colo.
Grant Swenson	Cloud	Farmer, Concordia, Kan.
Rachel Scholl	Crawford	Married Mr. Carpenter, ————, Cal.
Bessie Taylor	Douglas	Married W. E. Wait, Kingman, Kan.
1900.		
Frank E. Mikesell	Republic	Farmer, Republic, Kan.
Ralph E. Miller	Morris	Auto maker.
Leon Schrag	McPherson	Farmer, Moundridge, Kan.
May Thornton	Johnson	At home, Santa Fe, N. M.
William L. Tipton	McPherson	Farmer, McPherson, Kan.
1901.		
Alva Allen	Osage	Portland, Ore.
Frank Burson	Shawnee	Los Angeles, Cal.
Paul S. Curtis	Wyandotte	Kansas City, Mo.
Nettie Flowers	Pottawatomie	Married Henry Sickel, Leavenworth, Kan.
Nellie McLaughlin	Bourbon	Married Edward Fulton, Fort Scott, Kan.
Ole Paulson	Greenwood	Contractor, Eureka, Kan.
Nina Williams	Franklin	Married Sol. H. Lantz, Coats, Kan.
1902.		
Lenora Ewell	Allen	Married Sidney Price, Powhattan, Kan.
Amy Haden	Decatur	Married F. E. Mikesell, Republic, Kan.
Lee Hawkins	Russell	Farmer, Palco, Kan.
Rose M. Long	Ellsworth	Married O. W. Underhill, St. Augustine, Fla.
Joseph Modar	Mitchell	Shoemaker, ————, Ore.
*J. Conroy Peyton	Sumner	————
Iona A. Tade	Comanche	Married Thomas Simpson, Canton, Kan.
1903.		
Mazie F. Britt	Labette	Teacher, Sioux Falls, S. Dak.
Blanch Creekbaum	Wyandotte	Married Richard Makepeace, Kansas City, Mo.
Dottie D. Davidson	Douglas	Married Mr. Woolridge.
Bessie Donaldson	Washington	Married Ora Shimer, ————, Okla.
Linnie Hawkins	Russell	At home, Palco, Kan.
Amelia Hamant	Sedgwick	At home, Wichita, Kan.
Callie Hopper	Cherokee	Married Albert Ashley, Webb City, Mo.
N. Augustus Reed	Woodson	Smelter employee, Cherryvale, Kan.
Nettie Spence	Reno	Married B. R. Keach, Wichita, Kan.
Thomas S. Williams	Douglas	Farmer, Ruskin, Fla.
Ida Worrall	Decatur	Teacher, Fulton, Mo.
1904.		
Pearl Adams	Sumner	Married Stanley Dibble, Wichita, Kan.
John Dusch	Washington	Farmer, Hanover, Kan.
Mary Gillman	Logan	Married Mr. Gardner, Canada.
Irvin A. Fisher	Montgomery	Farmer, Stafford, Kan.
Alice Gregory	Shawnee	Married Mr. Whiston, Kansas City, Mo.
Crystal Lowman	Wilson	Married William Hurst, Emporia, Kan.
Chas. S. McLoughlin	Bourbon	Farmer, Fort Scott, Kan.
Waldo C. Reesink	Johnson	Shoemaker, Wamego, Kan.
Ollie S. Simpson	Johnson	Married Elmer Burch, Springhill, Kan.
1905.		
Lillian Clark	Neosho	Married Grant Swenson, Concordia, Kan.
Uluah Dillingham	Dickinson	Married Dalton Fuller, Wichita, Kan.
John L. O'Connor	Pottawatomie	Farmer, Blaine, Kan.
J. Roscoe Purkhiser	Cherokee	Goodyear Tire Co., Akron, Ohio.
William F. Shaefer	Wyandotte	Baker, Ottumwa, Iowa.
Grace M. Stevenson	Shawnee	Married Wm. F. Shaefer.
M. Edetha Williams	Osage	Married Robt. Unsworthy, Akron, Ohio.

GRADUATES—CONTINUED.

NAME.	County admitted from.	Occupation and present address.
1906.		
Alexander J. Benoit	Cloud	Shoemaker, Salina, Kan.
*Blanch Brown	Bourbon	————
Ethel F. Eaton	Lane	Kansas City, Mo.
Blanche Fair	Barber	At home, Sharon, Kan.
Homer Grace	Reno	Farmer, ————, Colo.
John T. Hower	Jewell	Akron, Ohio.
Bessie Thornton	Johnson	Married Norman Hunt, Kansas City, Mo.
1908.		
Walter K. Barnett	Franklin	Harness maker, Atchison, Kan.
Edna Branson	Greeley	Married Herbert Larson, Covington, Okla.
Cora A. Denton	Jewell	Springfield, Ore.
P. Washington Haner	Wyandotte	Printer, Kansas City, Kan.
Herbert Larson	McPherson	Farmer, Marquette, Kan.
Mabel Otney	Washington	Married George Pinto, Barnes, Kan.
Rilla Scott	Cherokee	Married Roscoe Purkisher, Akron, Ohio.
1909.		
Bertha Bean	Wyandotte	Factory employee, Kansas City, Kan.
Alice Blankenship	Wyandotte	Married Waldo Reesink, Wamego, Kan.
Mabel Boles	Reno	At home, Turon, Kan.
Effie Clements	Pratt	Married Mr. Moore, Tulsa, Okla.
Annie Donohue	Cowley	Wichita, Kan.
Louise Haefner	Lincoln	Married Lee Hawkins, Palco, Kan.
Kate Scheuerman	Rush	Bison, Kan.
Eva L. Steele	Brown	Married Leon Schrag, Moundridge, Kan.
Florence Stotler	Sedgwick	At home, Wichita, Kan.
1910.		
Floyd E. Buster	Wyandotte	Assistant Supervisor, Olathe, Kan.
Dora Campbell	Wyandotte	Married.
Ralph R. Decker	Anderson	Chemist, Chicago, Ill.
W. Lee Dedrick	Douglas	Housekeeper, Lawrence, Kan.
Leta G. Dillon	Butler	Married.
Edward S. Foltz	Sumner	Teacher, Mississippi school.
Frank Herrig	Leavenworth	Los Angeles, Cal.
Frederick A. Moore	Rice	Akron, Ohio.
Ethel R. Wickam	Wyandotte	Teacher, Sulphur, Okla.
*Ruth E. Williams	Johnson	————
1911.		
Robert H. Alexander	Shawnee	Horticulturist, Topeka, Kan.
Harry H. Hogan	Labette	Hotel dishwasher, Council Bluffs, Iowa.
Wallace McLaughlin	Bourbon	Farmer, Fort Scott, Kan.
Neva Rogers	Ellsworth	At home, Hays, Kan.
1912.		
Ruth Cornelia Atkins	Bourbon	College student, Washington, D. C.
Pearl Cline	Wilson	Bank employee, Kansas City, Mo.
Melvin C. Davidson	Sedgwick	College student, Washington, D. C.
LeRoy Julius Davis	Wyandotte	Rubber worker, Kansas City, Kan.
Annie Goodwin	Johnson	Married E. S. Coleman, Akron, Ohio.
Elpha Mae Pope	Morris	At home, Winterset, Iowa.
Violet Boyce Cowden	Sumner	California.
Joseph J. Haden	Decatur	Farmer, Decatur, Kan.
Bertha Anna Eliza Seng	Saline	Salina, Kan.
1913.		
Elmer Bowers	Marion	Baker, Merriam, Kan.
Frank Campbell	Neosho	Smelter, Bartlesville, Okla.
William Carrier	Montgomery	Indiana.
Chas. Deshazer	Douglas	Farmer, Columbus, Ohio.
George Harms	Neosho	Farmer, Cleo Springs, Okla.
Nellie Henderson	Cowley	At home, Hardy, Okla.
Samuel Turpen	Reno	Shoemaker, Partridge, Kan.

GRADUATES—CONCLUDED.

NAME.	County admitted from.	Occupation and present address.
1914.		
Edna Clara Amis	Smith	Factory employee, Kansas City, Mo.
Mamie Bernice Bradshaw	Wyandotte	Factory employee, Kansas City, Mo.
Frank Henry Dohrmann	Barton	College student, Washington, D. C.
Gerald Joseph Fergusen	Leavenworth	College student, Washington, D. C.
Caroline Matilda Jesperson	Douglas	At home, Lawrence, Kan.
Eva Irene Laws	Lyon	Married Earl R. Peters, Kansas City, Mo.
Earl Ray Peter	Johnson	Kansas City *Star* employee, Kansas City, Mo.
Sylvan James Riley	Wyandotte	Bank employee, Kansas City, Kan.
Lorraine Alberta Sawtell	Wyandotte	At home, Kansas City, Kan.
Harley Wright Smith	Franklin	Goodyear Tire Co., Akron, Ohio.
August Joseph Bender	Graham	Farmer, St. Peter, Kan.
Wilson Albert Brown	Saline	Farmer, New Cambria, Kan.
Leo Herman Vohs	Wyandotte	Steel Worker, Argentine, Kan.
1915.		
Stella May Cline	Wilson	Married Frank Campbell.
Wilford Keith Cunningham	Chautauqua	Goodyear Tire Co., Akron, Ohio.
Maude Eulalia Hodges	Sedgwick	At home, Wichita, Kan.
Hazel Pauline Louchs	Greenwood	At home, Piedmont, Kan.
Richard David Rawlings	Osage	Box-factory employee, Kansas City, Kan.
Edith Worrall Sawhill	Cloud	At home, Concordia, Kan.
1916.		
Virgil Bower	Riley	Goodyear Tire Co., Akron, Ohio.
Archie Grier	Johnson	Furniture Co., Wichita, Kan.
Ernest Haefner	Smith	Farmer.
Clyde Houze	Wyandotte	College student, Washington, D. C.
Lawrence Paxton	Pottawatomie	College student, Washington, D. C.
Julia Welch	Washington	———
1917.		
Orr Hoss	Ford	———
Helen Martin	Sedgwick	Home, Olathe, Kan.
Ruth Paxton	Pottawatomie	At home, Blaine, Kan.
Florence Phalp	Wyandotte	Irving-Pitt Mfg. Co., Kansas City, Mo.
George Stewart	Cherokee	Foundry, ———, Okla.
Jennette Wolverton	Jackson	———
1918.		
Lila Buster	Montgomery	Home, Kansas City, Kan.
Irvin Davis	Johnson	Buel Tire Co., Kansas City, Kan.
Lena Druit	Cherokee	Goodyear Tire Co., Akron, Ohio.
Nathan Lahn	Sedgwick	College student, Washington, D. C.
George Steinhauer	Leavenworth	Shoemaker, Leavenworth, Kan.
Cecil Tucker	Dickinson	At home, Abilene, Kan.
Waite Vaughn	Olathe	College student, Washington, D. C.
Joe Weber	Rush	Farmer, Liebenthal, Kan.

*Deceased.

STATISTICS—PUPILS.

ATTENDANCE BY COUNTIES.

Counties.	1916-'17.		1917-'18.	
	Boys.	Girls.	Boys.	Girls.
Allen	1	2		2
Anderson	3		3	
Atchison	1	2	1	2
Barber		1		1
Barton	1	1	1	1
Bourbon	3	2	2	2
Brown		1		1
Butler	2		4	1
Chase	1	1	1	1
Cherokee	5	5	5	4
Cheyenne	1		1	
Cloud	1	2		2
Coffey	2	1	2	1
Comanche	1			
Cowley	1	1		1
Crawford	5	9	4	9
Decatur		1		1
Dickinson	6	1	5	3
Doniphan		1		1
Douglas	3		2	
Elk	2		1	
Ellis		1		1
Ford	1		1	
Franklin	1	1		1
Geary		1		1
Gray	1		1	1
Graham	1		1	
Hamilton		1		1
Harvey	1		1	
Jackson		3		2
Jewell		1		
Johnson	18	8	18	8
Kearny				1
Kingman	1	1	1	
Labette	2	1	4	
Leavenworth	5		4	
Lynn	1		1	
Lyon	1		1	
Marion	1	3	1	2
Marshall	1		1	
McPherson				1
Mitchell		1		1
Montgomery	7	6	6	4
Nemaha	3		2	
Neosho	1	3		2
Norton	2		1	
Osage		2		2
Osborne	2		2	
Ottawa	1	1	1	1
Pawnee	1		1	
Pottawatomie	2	2	2	2
Pratt	1	1	1	
Rawlins		1		1
Reno	4	1	3	
Republic		1		1
Riley	3		3	
Rooks		3	1	4
Rush	5		4	
Russell	2		2	
Saline		1	2	1
Sedgwick	4	2	4	1
Shawnee	6	6	5	5
Stafford	1	1	1	1
Stevens		2		2
Sumner	1	2	1	
Washington	1	2	1	2
Wilson	7	1	6	2
Woodson		2		
Wyandotte	14	9	14	9
Totals	142	102	130	93

Totals, 1916-'17, 244; 1917-'18, 223.

CAUSES OF DEAFNESS AS REPORTED BY PARENTS.

Abscesses	1	La grippe	6
Accident	1	Mastoid abscesses	2
Adenoids	6	Measles	8
Adenoids and meningitis	1	Measles and whooping cough	1
Born partially deaf	1	Membranous croup	1
Brain fever	1	Meningitis	1
Brain fever and meningitis	1	Mumps	3
Brain meningitis	1	Paralysis	1
Catarrh	6	Pistol shot	1
Catarrhal fever	1	Pneumonia	5
Chickenpox	1	Poor circulation	1
Cold	3	Rheumatism	1
Congenital	74	Scarlet fever	13
Croup and diphtheria	1	Sickness	6
Diphtheria	1	Smallpox	1
Earache	3	Spinal meningitis	29
Earache and whooping cough	1	Tonsilitis	1
Explosion	1	Treatment for scrofula	1
Fall	7	Typhoid fever	2
Fever (kind unknown)	5	Typhoid and measles	1
Gathering in ear	2	Typhoid and meningitis	2
Gathering in head	7	Typhoid pneumonia	1
Inflammation in head	1	Whooping cough	3
Inflammatory fever	1	Unknown	47
Infantile paralysis	1		
Injured at birth	2	Total	269

FINANCIAL STATISTICS.

TABLE No. 1. Appropriations for current expenses.

ITEMS.	Year ending June 30, 1917.	Year ending June 30, 1918.
Salaries:		
Appropriated for fiscal year	$33,119.94	$34,543.39
Expended during fiscal year	31,076.55	31,027.77
Unexpended balance June 30	$2,043.39	$3,515.62
Maintenance and repairs:		
Appropriated for fiscal year	$34,563.14	$34,187.87
Expended during fiscal year	33,375.27	34,187.82
Unexpended balance June 30	$1,187.87	$0.05
Fees fund:		
Balance on hand June 30	$1,723.16	$1,930.82
Collected during fiscal year	2,582.00	2,831.58
Expended during fiscal year	2,374.34	1,456.12
Unexpended balance June 30	$1,930.82	$3,306.28
Recapitulation:		
Total spent from salaries, maintenance and repairs and fees fund	$66,826.16	$66,671.71
Total unexpended balance in state treasury, salaries, maintenance and repairs and fees fund, June 30	5,163.08	6,821.95
Reappropriated:		
Salaries	$2,043.39	$3,515.63
Maintenance and repairs	1,187.87	.05
Fees	1,930.82	3,306.28
Total reappropriated	$5,162.08	$6,821.95

TABLE No. 2. Receipts and disbursements of fees.

ITEMS.	Year ending June 30, 1917.	Year ending June 30, 1918.
Received by superintendent	$2,582.00	$2,831.58
Paid to state treasurer	2,582.00	2,831.58

TABLE No. 3. Contingent fund.

ITEM.	Year ending June 30, 1917.	Year ending June 30, 1918.
Cash in hands of superintendent	$250.00	$250.00

TABLE No. 4. Salary revolving fund.

ITEM.	Year ending June 30, 1917.	Year ending June 30, 1918.
Cash in hands of superintendent	$100.00	$100.00

TABLE No. 5. Private money of pupils.

ITEMS.	Year ending June 30, 1917.		Year ending June 30, 1918.	
	Dr.	Cr.	Dr.	Cr.
On hand July 1	$85.22		$194.00	
Overdrafts	16.53		11.74	
Received during fiscal year	1,735.69		1,733.96	
Expended during fiscal year		$1,643.44		$1,691.09
Balance on hand June 30		194.00		248.61
Totals	$1,837.44	$1,837.44	$1,939.70	$1,939.70

TABLE No. 6. Purchase and issue of stores.

ITEMS.	Year ending June 30, 1917.	Year ending June 30, 1918.
Stores on hand and paid for at beginning of year:		
Commissaries	$651.87	$1,099.03
Property	1,577.97	1,859.54
Purchased and paid for during the year:		
Commissaries	16,555.28	18,147.30
Property	19,194.33	17,496.64
Totals	$37,979.45	$38,602.51
Issued during fiscal year:		
Commissaries	$16,108.12	$17,740.25
Property	18,913.76	16,701.73
Remaining on hand and paid for at end of year:		
Commissaries	1,099.03	1,506.08
Property	1,859.54	2,654.45
Totals	$37,979.45	$38,602.51

TABLE No. 7. Total cost per capita.

ITEMS.	Year ending June 30, 1917.	Year ending June 30, 1918.
Average number of pupils	243	229
Based on appropriations used:		
Salaries	$31,076.55	$31,027.77
Maintenance and repairs	33,375.27	34,187.82
Fees	2,374.34	1,456.12
Totals	$66,826.16	$66,671.71
Per capita cost based on expenditures	276.14	291.14
Based on issues:		
Salaries	$31,076.55	$31,027.77
Maintenance and repairs	32,646.54	32,999.35
Fees	2,374.34	1,442.63
Totals	$66,097.43	$65,469.75
Per capita cost based on issues	273.13	285.46
Total ordinary support based on issues	$66,097.43	$65,469.75
Value of coal used from Penitentiary	599.38	80.78
Value of work from state printer	20.53	27.07
Totals	$66,717.34	$65,577.60
Actual cost per capita to taxpayers	275.69	286.36
Less fees collected and remitted	$2,582.00	$2,831.58
Totals	$64,135.34	$62,746.02
Per capita	265.02	274.00

TABLE No. 8. Livestock account.

ITEMS.	Year ending June 30, 1917.		Year ending June 30, 1918.			
	Horses.	Hogs.	Horses.	Hogs.	Shoats.	Pigs.
On hand July 1	3	47	3	22	....	35
Purchased	....	1	....	....	....	....
Increased	....	43	....	....	....	63
From pigs	....	....	....	1	18	....
Totals	3	91	3	23	18	98
Sold	....	12	....	15	....	32
Died	....	7	....	1	....	5
Butchered	....	15	....	....	....	....
Matured to shoats	....	....	....	....	....	19
Total deducted	....	34	....	16	....	56
Remaining on hand July 1	3	57	3	7	18	42

BIENNIAL REPORT

OF THE

KANSAS
SCHOOL FOR THE BLIND

KANSAS CITY, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Governor.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

RESIDENT OFFICER:

LEE HARRISON.................................Superintendent.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1919
7-5219

REPORT OF SUPERINTENDENT.

To the Honorable Board of Administration:

GENTLEMEN—I have the honor to submit the following report of the State School for the Blind for the biennium ending June 30, 1918:

DEPARTMENTS OF THE SCHOOL.

EXPRESSION.

The Expression Department is one of great value to the pupils, giving them poise and assurance necessary to a successful business or social life. A systematic course in voice culture and literary interpretation is given. A three-fold training is achieved by expression: Mentally—memory work is necessary to this art; also the imagination must be trained to portray other times and scenes and to assume different personalities. Morally—readings, scenes and sketches from the best writers only are given. Physically—poise and strength are required by drills necessary to secure correct dramatic expression. A play is given each year by the members of the senior class. During the past year eighteen pupils have received regular individual instruction. Beside these, special assistance has been given to other programs, preparing the student to appear in public.

GIRLS' PHYSICAL TRAINING.

"Thy body at its best. How far can that project
Thy soul on its lone way?"—*Browning.*

The gymnasium is equipped with a ladder, lifting machine, turning horse, dumb bells, wands, Indian clubs and other apparatus. The students are divided into four groups: kindergarten, intermediates, juniors and advanced. The younger children are trained in simple breathing and muscular exercises, which gradually increase in complexity until they are able to work with wands, clubs, and apparatus work. The older students, having gained poise and control, acquire grace in the simple folk and esthetic dances. Drills are given several times during the year. A splendid exhibition of the work was given at the May fete.

MUSIC DEPARTMENT.

All students are given instruction in music, not only for its esthetic value, but as a means for the cultivation of entire accuracy of hearing. Both the junior and senior choruses sing each day, and those who show talent are given individual instruction. The length of time given to such instruction depends upon the pupil's need. Sometimes a long course of training is needed to overcome some mechanical difficulty, while other students without such impediment may advance much more rapidly. All are entered according to their ability and given the most careful and systematic instruction. All pupils must take piano lessons unless excused by music director after a thorough effort to master the same.

Violin, voice and piano are offered, and every effort is made to prepare pupils for professional work and for earning their own living, and the opportunity is given to those ready to appear in public.

Recognizing the ennobling and refining influence of good music, we endeavor to have the students hear only the best music, and opportunities are offered to attend the best concerts and recitals.

Ensemble work is afforded in the Senior Chorus, Junior Chorus, and Orchestra. Recitals are given by the advanced pupils and faculty of the music department quite frequently.

PIANO TUNING.

The course offered is a thorough and practical drill in the repair and tuning of various kinds of pianos, including a piano player purchased for the purpose. Members of the class do some piano tuning outside of the school. This gives them practical experience in dealing with people as well as mechanical skill. This department has been enlarged by an additional room to be used exclusively for repair work.

TYPEWRITING DEPARTMENT.

This department has a dictaphone and a good supply of typewriters. The pupils are usually eager to learn typewriting, as they realize its advantage as a means of communication.

The pupils receive careful and persistent drill in spelling, punctuation, and the ordinary forms of business letters. After attaining a fair degree of proficiency they are allowed the privilege of using a typewriter for letter writing. Several have developed speed as well as skill in this line of work.

DOMESTIC SCIENCE.

The purpose of this department is three-fold; the first aim is training the mind to purposeful thinking. Second aim—teaching the student to perform the simple muscular movements required in such operations as mixing, stirring, beating, cutting and folding. Third aim—teaching the girls the ordinary household tasks so they may become helpful in their homes.

To develop capacity to earn is not the primary object of this department.

The growing realization of importance and interest in the study of domestic science has made it necessary in so far as possible to establish a standard of study, limited under the existing conditions by the individuality of the teacher.

Emphasis is laid on the theoretical and practical lessons in cooking.

Theoretical lessons are taught by lecture, dictation and recitation as suggested by the following outline:

1. Foods in general: Definition; classification; use.
2. Study of the five foodstuffs as to principles which separate them into classes.
3. Foods related to the different classes studied as to (*a*) source, (*b*) composition, (*c*) production, (*d*) digestion, (*e*) economic and nutritive value, (*f*) care.
    - (*a*) Water: Tea, coffee, fruits, fresh vegetables.
    - (*b*) Mineral matter: vegetables, fruits.

(*c*) Fat: Butter, cream, olive oil, oleomargarine, bacon, and other fat meats, nuts.
(*d*) Carbohydrates: Cereals and cereal products, starchy vegetables, sugar, honey, sweet dried fruits.
(*e*) Protein: Milk, eggs, meat, cheese, beans, peas, some nuts and cereals.

4. Preparing and serving meals, with underlying results.

The practical lessons in cooking are the application in the laboratory of the above representative foods. The amount of theoretical and practical work is left to the discretion of the teacher.

Cleanliness, order, and exactness of measure are emphasized in the laboratory, also a study of equipment; purpose and method of using, and care of each utensil. The students assist in caring for the domestic-science room.

Two hours per week with credit toward graduation is given to each class. The classes are divided according to grades.

(1) Girls below the seventh grade.
(2) Eighth-grade girls.
(3) Freshmen and sophomores.
(4) Juniors and seniors.

The work this year, in a simple way, has been carried out in accordance with the Food Conservation.

LAUNDRY WORK.

Instruction is given one hour per week in ironing, to the students, divided into classes according to grades:

(1) Beginners or new pupils.
(2) Intermediate girls.
(3) Girls below seventh grade.
(4) Eighth-grade girls and freshmen.
(5) Sophomore girls.

Many of these students do their own laundry work. Credit is given toward graduation in these classes.

GIRLS' INDUSTRIAL DEPARTMENT.

In the girls' industrial department the pupils are taught all kinds of hand sewing, crocheting, knitting, rug making, bead work and basketry. This department has done a large amount of work for the household department, such as hemming table linen, dish towels, sheets, pillow cases and towels. Several new classes have been organized in this department, and nearly all of the girls have mastered the preparation stitches for sewing and crocheting. The older girls are producing a fine grade of work. Many of them have learned to sew neatly by hand, and several of them can use the sewing machine with neatness and dispatch.

Instruction in knitting has always been given in this department, and with the steadily increasing demand for the knitted article, we have the more diligently applied ourselves.

All the girl students from the primary through the high-school grades, even including some of the younger boys, have learned to cast, bind off, purl, and knit. A number of knitted articles, including wash cloths, scarfs, bootees, small sweaters and children's caps, have been completed this present school year.

Through mastering the art of knitting the students are benefiting themselves while doing a great service for their country.

With our carpet loom many beautiful rugs have been woven by some of the students of this department. With the knowledge obtained in this line of work a student can become independent and care for himself in the future.

The pupils apply themselves well to their work, and all who see them are pleased with their progress. The high quality of the students' work was recognized by the Kansas Free Fair Association, Topeka, 1916, when we were awarded a beautiful loving cup—first honors—for our display in the textile department.

BOYS' INDUSTRIAL DEPARTMENT

This department has been self supporting for a number of years and has trained adults as well as regular students to become self-sustaining. Several counties in the past have found it a matter of economy to advance means to blind men to buy the machinery for broom making and then let them pay back the money in small installments.

The State Board of Administration feels that every blind adult in the state can and should be self-sustaining, and with that in view has arranged to give all who may come instruction in broom making during the forenoon of each day. They will have to support themselves or be supported for the six to nine months necessary to learn the trade—but after that they should be self-supporting.

The youngest boys occupy their time in arranging broomcorn straws. The intermediate grades sort corn, and learn to cane chairs and make hammocks, rope, nets and baskets. The older boys learn every detail of broom making by actual experience. When they can make salable brooms they receive a small payment for each dozen produced. They also secure a small commission upon hammocks and fly nets. While these payments are not large, they encourage the boys in habits of thrift and industry. The output of nets and hammocks has been much larger this season, as the boys have been allowed to work in their own rooms during their spare time, the state furnishing them with twine at cost and allowing them the profit on their own work if they sell it themselves.

During this year the students of the Boys' Industrial have made a creditable number of heavy fly nets, light buggy nets, curtain hammocks, plain hammocks, baby and doll hammocks, hook nets, twisted halter ropes, clothes hampers, shopping bags. They have caned a number of chairs, and the output of brooms has included heavy barn or warehouse brooms, common house brooms, and special parlor brooms.

LIBRARY.

If you were to stroll into the children's library at the School for the Blind some Monday afternoon you would be quite likely to meet a small boy carrying away a volume over half the size of an unabridged dictionary, and you might be led to fancy that the children were being seriously overworked. But the book would probably be a copy of the Arabian Nights, and when you saw the lad's eager interest your alarm would cease.

In fact, most of the pupils take the greatest interest in their library. A very large proportion of them keep up a constant course of reading in spite of the fact that their regular work is rather heavy. A card record is kept of the books read by each pupil.

The library proper has about a thousand volumes, and there are in the same room as many more textbooks often used for general reference. This does not mean that there are a thousand separate works. Such a book as David Copperfield fills six volumes in "point," as the raised print is called. As is natural in a school, a large part of the library consists of juvenile books of travel and adventure. Other important groups are: Fiction, poetry and drama, essays, history and biography, popular science, and books about music. This last group, which is much in demand, is of course suited to the needs of such a school as ours. In all the collection there is not a trashy book, for nothing but good literature is put into point for the blind.

Perhaps you may feel inclined to question whether it is a good plan to develop so carefully a taste for good reading in young people who may never have a chance after they leave school to get books in raised type. But the work of the library does not stop with furnishing reading matter to the students now in school. One of the regular duties is to send our books to the blind in this and other states. Congress has provided that reading matter for the blind may be sent free of postage, so that any responsible blind person may obtain from the School, without expense, the loan of any book not in use. The School is always glad to send out books. Many of our former students keep up their reading in this way.

Each year new books are added, though the number can not be great, since the average cost in this type is about three dollars a volume. We have a library appropriation, but a large part of this has to be spent on textbooks and music needed in regular work. There is usually barely enough left to enable us to get a few of the great books that are each year being printed for the blind.

It is our aim to bring the library to a point where it will be able to do the most good, not only to our own pupils, but to the blind of the state. It is not hard to see what a pleasure a taste for good reading and a chance to obtain good books must be to people shut out from many avenues of enjoyment.

AN INCIDENT.

The Kansas State School for the Blind is not a hospital. Neither is it a place to send children for medical treatment. Children who come to us are required to be of good health. While this is true, we regard it the school's duty to advise with parents on the proper course to pursue when, in our judgment, any child's vision may be improved.

Specialists in the treatment of the eye, no matter how high the degree of proficiency and skill they may have attained through years of careful research and experience, cannot work miracles.

Still, to bring encouragement to parents and friends of children with defective sight, we may truly state that the improvement in the cases of some of our students has been little short of marvelous.

Thinking along the above lines, an interesting case has recently come under our observation. On January 19 a Kansas mother called at the State School for the Blind. Like others she has lived for years within the state of Kansas, yet knew practically nothing about the work being done here, nor had she any reason to take special interest in a school for the teaching of blind children. But when her twelve-year-old boy was compelled to quit the fifth grade in the seeing schools on account of partial blindness which had come upon him, she came to investigate the school and the methods of study.

The parents of this boy had spared no expense in procuring the best medical treatment. Observing no visible signs of improvement had caused them to abandon hope for their boy regaining his sight, and as a last resort for his advancement they were seeking a school where he could pursue his studies.

He was enrolled the following Monday. He was led into the office, not being able to see a thing with the left eye, and the vision of the right eye was greatly impaired. He was immediately examined by Dr. E. J. Curran, the school's ophthalmologist, and placed under his care. While taking treatment he was in school going on with his studies where he had left off in the grades. He was at the same time being corrected of habits formed since losing his sight which are usually characteristic in youthful blind until rightly trained. He was encouraged to sit erect while reading or studying, and to find his way about the premises without groping.

At the end of the first month the bandages were removed. At the expiration of eight weeks the right eye had gained wonderfully in strength, and with the left eye he could read ordinary print. Every encouragement is now held out that when next September comes this boy can again enter the seeing schools.

This is just one instance of marked improvement among many, and it is hoped that other parents having children with defective vision will grasp the opportunities for improvement and schooling the Kansas State School for the Blind has to offer.

COURSE OF STUDY.

KINDERGARTEN.

FIRST AND SECOND SEMESTERS. Number work: Combinations up to 20. Memorizing of poems: Stevenson, selected verses. Point writing: Alphabet and simple sentences. Reading point: Simple sentences (prepared by teacher). Bead and rafia work. Phone work. Ear training: Songs and singing games. Gymnastics. Story telling and dramatization.

FIRST GRADE.

FIRST AND SECOND SEMESTERS. Reading: Waits' First Point Reader. Progressive First (capital letters), spelling (phonic), and words from reading lessons. Printing sentences: Simple stories, use of punctuation and capitals. Numbers: Forty-five combinations. Language: Oral expression, and reproduction dramatization. Chorus work, ear training, breathing song, operetta. Girls' gymnasium.

SECOND GRADE.

First and Second Semesters. Reading: Appleton's Second, Cyr's Second, Progressive second. Spelling: (phonics). Printing: Stories and verse from dictation, capitals and dictation. Numbers: Four fundamental operations. Language: use of words in oral expression, simple composition, oral and written. Chorus work. Girls' gymnasium.

THIRD GRADE.

First and Second Semesters. Reading: Cyr's Third. Progressive Second, in review. Spelling: Words from reading and dictation. Arithmetic: Four fundamentals, drill problems. Printing: Dictation and written composition. Language: Oral expression; composition, oral and written. Geography: Directions, stories of nations, stories of industry. Chorus. Nature study.

FOURTH GRADE.

Reading: Cyr's Fourth Reader; Supplemental reading; dictation. Spelling: Words from daily lessons; Rational Speller, third year. Arithmetic: Review work in fundamentals; long division; simple fractions. English: Composition, oral and written; letter writing; study of standard selections and life of authors; the sentence; word forms. Geography: Tarr and McMurray's, Book 2. The earth as a whole; the United States; countries north and south of the United States. Supplemental work from Carpenter's Geographical Reader, North America.

FIFTH GRADE.

Reading: Cyr's Fourth, completed; supplemental reading. Spelling: Words selected from daily lessons; Rational Speller, Book 3. English: Composition, oral and written; letter writing; the paragraph; some formal grammar. Arithmetic: Walsh's Grammar School Arithmetic; review of work in fractions and long division; continue study of fractions; decimals. Geography: Tarr and McMurray's, Book 2, South America; Europe; supplemental reading from Carpenter's Geographical Reader.

SIXTH GRADE.

Reading: Eighth Reader and supplemental reading. Writing: Dictation, and composition writing. Spelling from Rational Speller. Grammar: Reed and Kellogg, volume 1, composition work. Geography: Tarr and McMurray's, Part 5, volume 1. Arithmetic: Walsh's, Part 1, volume 2. Music and industries.

SEVENTH YEAR.

Reading and writing in connection with other work. Spelling from Rational Spellers. United States history: McMaster's. Kansas history: Arnold's, from reading and dictation. Grammar: Reed and Kellogg's, volume 2. Arithmetic: Walsh's, part 2, volume 1. Typewriting, music, industries.

EIGHTH YEAR.

Reading and writing in connection with other work. Spelling: Rational Spellers. Physiology: Steele's. Civil government: Arnold's, studied from notes dictated. Grammar: Classics read and studied. Arithmetic: Walsh's, Part 2. Typewriting, music and industries.

THE HIGH-SCHOOL COURSE.

The general aim of our high-school course is to open for our students in some slight degree at least a great many of the separate doors to the immense field of knowledge, thus giving our students a glimpse over many portions of that field that is so broad that but little part of it can be traversed in a lifetime. We want our students to learn to understand and appreciate to some extent the biggest and best things in life, for we know that such understanding and appreciation can do more toward engendering noble aims and high ideals in their lives than can any other factor in education.

SUBJECT BY YEARS.

FRESHMAN. Algebra, ancient history, physical geography, domestic art and science, expression.

SOPHOMORE. Geometry, English history, mythology, general science, English literature, domestic art and science, expression.

JUNIOR. English literature, English history, psychology, philosophy, history of religions, social sciences, domestic art and science, expression.

SENIOR. English history, psychology, philosophy, history of religions, social sciences, expression.

ENROLLMENT DURING PAST TEN YEARS.

1908-1909	89	1913-1914	78
1909-1910	94	1914-1915	73
1910-1911	98	1915-1916	93
1911-1912	83	1916-1917	111
1912-1913	95	1917-1918	105

STUDENTS BY COUNTIES, 1917-'18.

Allen	2	Logan	1
Atchison	2	Marion	1
Barton	2	Meade	1
Bourbon	2	Montgomery	4
Brown	1	McPherson	4
Chautauqua	2	Mitchell	1
Cherokee	1	Miami	1
Crawford	10	Nemaha	1
Cheyenne	1	Neosho	3
Cloud	1	Osage	1
Cowley	1	Ottawa	1
Coffey	1	Pawnee	1
Doniphan	1	Pottawatomie	1
Douglas	2	Riley	2
Ellsworth	1	Republic	1
Franklin	3	Russell	2
Ford	2	Reno	1
Geary	1	Shawnee	3
Jefferson	2	Sedgwick	4
Johnson	2	Sumner	2
Jewell	1	Smith	2
Kingman	1	Woodson	1
Labette	5	Wyandotte	16
Lyon	2		

GOVERNMENT WORK.

During the year the institution gave seven officers and employees to the army service, while ten husbands and sons of officers and employees are in the army service.

The industrial departments, as well as individual students, have done considerable knitting for the Red Cross. The institution has contributed liberally to liberty loan, Red Cross and Y. M. C. A. funds. The institution has offered its services to the government in matters pertaining to the instruction of blind soldiers.

NEEDS OF THE INSTITUTION.

The most urgent need is an increase in salary and maintenance appropriations. During the year we have lost more than half of our employees on account of their receiving higher wages elsewhere. Women that had received $1 per day here are drawing $2.50 and $3 per day in the packing houses and from the railroads.

A liberal appropriation for repairs is needed. It is desirable to have new floors laid in the main building. The entire plumbing system in the main building will soon have to be replaced. No painting has been done for the past two years and it will be necessary to paint the entire plant. The dormitories will have to be refurnished with the next biennium. On account of the change in the government's policy of printing textbooks for the blind, it will be necessary to purchase a considerable number of new books. The building known as Teachers' Cottage should be torn down before it falls and injures some one. Better facilities for storing coal should be provided. The heating plant should have a thorough overhauling, as it is wasteful both in fuel and labor.

STATISTICAL REPORT.

Fiscal year ending June 30, 1918.

Receipts:		
Salaries and wages appropriation	$15,000.00	
Maintenance and repairs appropriation	21,000.00	
Balance carried over previous year	3,287.50	
Fees received	3,404.78	
Total		$42,692.28
Expenditures:		
Salaries and wages expenditures	$16,380.00	
Maintenance and repairs expenditures	24,369.08	
Total		$40,749.08
July 1, 1918, balance carried over		$1,943.20
Amount available year ending June 30, 1919:		
Salaries and wages	$15,000.00	
Maintenance and repairs	21,000.00	
		$36,000.00
		$39,943.20
Amount less this year than last		$4,749.02

It will be seen that the amount paid out for salaries and wages during the fiscal year exceeds the amount available in the appropriation for the current year. This necessitates asking the legislature for sufficient funds to finish the present year, available funds not being adequate.

ADDITIONS AND IMPROVEMENTS.

No additions or improvements have been made in the plant and equipment during the biennium. Inasmuch as our increased cost of maintenance consumed our funds, the physical equipment had to be neglected.

SUGGESTED NEEDS OF THE INSTITUTION.

An appropriation of $3,000 for salaries and $10,000 for maintenance and repairs will be required to finish the present fiscal year, and an appropriation for the next biennium as follows:

Salaries, each year	$18,000
Maintenance and repairs, each year	32,000
Total, each year	$50,000
To removing teachers' cottage and erection of boys' dormitory	$50,000
To remodeling main building	10,000
To remodeling heat plant	10,000

Inasmuch as it is certain, on account of the war, that Kansas will soon have a number of blind who are unfitted for other employment, a liberal appropriation should be made to enable the school to establish a commercial workshop in the business part of Kansas City, Kan., where adult blind may be taught a trade and at the same time furnish employment to any male blind in the state. For this purpose a revolving fund of $25,000 and $10,000 for purchasing equipment should be made available. This step is in keeping with many other states, notably Maryland, and is not a charitable, but an economic move.

LEE HARRISON,
Superintendent.

BIENNIAL REPORT

OF THE

KANSAS
STATE FISH HATCHERY

PRATT, KANSAS

For the Two Years Ending June 30, 1918.

GENERAL OFFICERS:

STATE BOARD OF ADMINISTRATION,
State Capitol Building, Topeka.

ARTHUR CAPPER, *Governor.*
E. W. HOCH. C. W. GREEN. WILBUR N. MASON.
JAMES A. KIMBALL, *Business Manager.*
FLOYD A. BAKER, *Asst. Business Manager.*
JAMES T. LARDNER, *Asst. Business Manager.*

RESIDENT OFFICER:

W. C. TEGMEIER..Superintendent.

KANSAS STATE PRINTING PLANT
W. R. SMITH, STATE PRINTER
TOPEKA. 1919
7-5499

REPORT OF SUPERINTENDENT.

OFFICE OF THE STATE FISH AND GAME WARDEN,
PRATT, KAN., July 1, 1918.

Honorable Arthur Capper, Governor:

SIR—I have the honor to submit to you my second biennial report of the receipts and disbursements of the Fish and Game Department.

I also submit herein, according to law, such suggestions and recommendations as will, in my judgment, materially aid the department in the propagation, protection and distribution of fish and game.

VALUE OF STATE PROPERTY.

187.69 acres of land	$24,600
97 ponds on New Hatchery	97,000
10 ponds, and buildings on Old Hatchery	15,000
Buildings on west 40 acres	1,000
Other buildings on New Hatchery	45,000
Tools and movable property	12,000
Total	$194,600

PERMANENT IMPROVEMENTS.

In October, 1916, a 25,000-gallon steel tank and tower was erected on the New Hatchery at a cost of $2,200. In December, 1917, a gas engine and electric generator was purchased and placed on the fish car for lighting purposes. The price of engine, generator and equipment, $300. A new four-room frame cottage was erected in June, 1918, on the New Hatchery, the contract price being $2,806.50. Other permanent improvements have been made as repairs.

COMPARISON IN FISH DISTRIBUTION.

Fall 1914 and spring 1915, including goldfish	303,000
Fall 1915 and spring 1916, not including goldfish	465,000
Fall 1916 and spring 1917, not including goldfish	532,300
Fall 1917 and spring 1918, not including goldfish	750,000

RECOMMENDATIONS FOR LAWS.

I recommend that all the money on hand and all money hereafter paid by hunters, trappers and fishermen for a combined hunting, trapping and fishing license be appropriated for the propagation and protection of fish and game, one-half of the money so derived being used for the propagation and protection and distribution of fish and the upkeep of the Fish Hatchery, the remaining one-half to be used for the propagation and protection and distribution of game and game birds and the upkeep and improvement of the state game preserve.

From the fund created by the sale of a combined hunting, fishing and trapping license, a salary should be paid to competent deputy fish and game wardens, such deputy fish and game wardens to devote their entire time to the duties of the office of deputy fish and game warden. With such a patrol of our fields and streams the number of violations of the fish and game law, such as seines, nets, traps, etc., will decrease, our small fish will be allowed to grow and become of some value as food, our game and our birds will be given protection and the limit not exceeded during an open season. Fewer persons will hunt without a license, furs will not be taken out of season, throwing an inferior grade of furs upon the market. These and many other violations will be checked by a force of salaried deputy fish and game wardens.

Owing to the fact that hunting licenses will be issued free to honorably discharged soldiers and sailors of Kansas, I recommend that our license law be made to include fishing.

Since the legislature of 1915 amended the fish and game law so as to deprive the county clerks of a fee for issuing hunting licenses, there has been a marked decrease in the sale of hunting licenses. I therefore recommend that a fee of 10 per cent be allowed county clerks for issuing hunting licenses.

The following is a comparative statement of the sales of hunting licenses by counties for the fiscal years ending June 30, 1917, and June 30, 1918:

County.	1917.	1918.
Allen	565	651
Anderson	55	61
Atchison	766	596
Barber	140	167
Barton	502	565
Bourbon	146	203
Brown	578	616
Butler	256	591
Chase	207	206
Chautauqua	82	68
Cherokee	804	785
Cheyenne	4	11
Clark	114	110
Clay	333	313
Cloud	251	172
Coffey	70	63
Comanche	43	30
Cowley	464	425
Crawford	1,669	1,640
Decatur	29	22
Dickinson	409	380
Doniphan	487	510
Douglas	651	572
Edwards	132	115
Elk	114	67
Ellis	82	107
Ellsworth	170	145
Finney	150	38
Ford	277	187
Franklin	454	437
Geary	260	377
Gove	46	30
Graham	90	45
Grant	2	4

County.	1917.	1918.
Gray	187	54
Greeley	9	19
Greenwood	227	359
Hamilton	79	58
Harper	50	53
Harvey	499	490
Haskell	35	15
Hodgeman	76	31
Jackson	174	136
Jefferson	219	139
Jewell	41	42
Johnson	509	352
Kearny	57	38
Kingman	88	115
Kiowa	57	56
Labette	532	511
Lane	9	12
Leavenworth	545	438
Lincoln	100	88
Linn	166	140
Logan	65	48
Lyon	346	357
Marion	536	472
Marshall	400	325
McPherson	557	372
Meade	109	80
Miami	258	319
Mitchell	204	144
Montgomery	832	838
Morris	152	145
Morton	4	3
Nemeha	127	60
Neosho	303	352
Ness	77	60
Norton	36	20
Osage	121	126
Osborne	67	36
Ottawa	196	139
Pawnee	290	338
Phillips	57	43
Pottawatomie	293	276
Pratt	216	253
Rawlins	21	34
Reno	796	684
Republic	120	107
Rice	277	267
Riley	536	588
Rooks	226	178
Rush	95	62
Russell	38	53
Saline	473	583
Scott	38	40
Sedgwick	874	897
Seward	26	39
Shawnee	2,270	2,265
Sheridan	45	35
Sherman	80	146
Smith	66	57
Stafford	343	294

County.	1917.	1918.
Stanton	None	1
Stevens	None	None
Sumner	346	320
Thomas	42	86
Trego	51	44
Wabaunsee	104	128
Wallace	43	25
Washington	201	150
Wichita	6	9
Wilson	245	205
Woodson	66	82
Wyandotte	2,603	3,087
Totals	29,338	28,727

NONRESIDENT LICENSE SALES.

Date.	Name and address.	Amount.	
July 1, 1916	Fred Arnhold, St. Joseph, Mo	$15.00	
Sept. 1, 1916	Frank P. Weigel, St. Joseph, Mo	15.00	
			$30.00
Aug. 30, 1917	Fred Arnhold, St. Joseph, Mo	$15.00	
Sept. 26, 1917	W. J. Baehr, Kansas City, Mo	15.00	
Oct. 2, 1917	W. B. Weidler, Kansas City, Mo	15.00	
Oct. 2, 1917	Aaron Jenkins, Kansas City, Mo	15.00	
Oct. 27, 1917	E. L. Cooper, St. Joseph, Mo	15.00	
			75.00

Total nonresident license sales, 1916 to 1918	$105.00
Total nonresident license sales, 1908 to 1913—five years	*$1,455.00
Total nonresident license sales, 1913 to 1918—five years	330.00

RECEIPTS AND DISBURSEMENTS.

Appropriation, fiscal year ending June 30, 1917		$20,000.00
Disbursements, 1917:		
Salary and labor	$8,510.00	
Maintenance and repair	5,227.80	
Transportation	1,142.98	
Permanent improvements	2,418.28	
		17,299.12
Balance on hand July 1, 1917		$2,700.88
Appropriation, fiscal year ending June 30, 1918		$20,000.00
Disbursements, 1918:		
Salary and labor	$9,370.59	
Maintenance and repair	5,886.66	
Transportation	1,056.21	
Permanent improvements	3,106.50	
		19,419.96
Balance on hand July 1, 1918		$580.00

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* Between the years 1908 and 1913 deputy wardens were paid a salary to look after law enforcement. Between 1913 and 1918 we had a system of county deputies without salary.

FISH AND GAME.

Balance July 1, 1918:		
Inactive	$16,960.88	
Active	3,933.56	
		$20,894.44

GAME PRESERVE FUND.

Balance July 1, 1918:		
Inactive	$10,603.20	
Active	2,000.00	
		$12,603.20
		$33,497.64

Respectfully submitted.

W. C. TEGMEIER.

MAY 1 1921